

## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 1

10151 CROYDON WAY, SUITE 3

SACRAMENTO, CA 95827-2106



## HAZARDOUS WASTE FACILITY PERMIT

Facility: Laidlaw Environmental Services (Lokern), Inc.  
2500 West Lokern Road  
Buttonwillow, California 93206  
EPA ID Number: CAD 980 675 276

Operator: Laidlaw Environmental Services (Lokern), Inc.  
2500 West Lokern Road  
Buttonwillow, California 93206

Owner: Laidlaw Environmental Services (Lokern), Inc.  
2500 West Lokern Road  
Buttonwillow, California 93206

Effective Date: April 6, 1996

Expiration Date: April 6, 2006

Pursuant to Section 25200 of the California Health and Safety Code (hereinafter referred to as the H&S Code), this Hazardous Waste Facility Permit (hereinafter referred to as the Permit) is granted to Laidlaw Environmental Services (Lokern), Inc. (hereinafter called the Permittee), the owner and operator of the Laidlaw Environmental Services (Lokern), Inc., Facility (hereinafter called the Facility), subject to the conditions set forth in Attachment A, which consists of Parts I through VIII and by this reference is incorporated herein.

The Permittee is permitted to treat, transfer, store and dispose of hazardous waste in accordance with the conditions of this Permit. Any management of hazardous waste not authorized by this Permit is prohibited.

The Permittee operates a commercial, hazardous waste treatment, storage, and disposal facility located in Kern County, California, approximately 8 miles west of the community of Buttonwillow and 36 miles west of Bakersfield, at north latitude 35° 24' 00" and west longitude 119° 38' 00". The Facility occupies 320 acres owned by the Permittee and is located in the eastern 1/2 of Section 16, Township 29S, Range 22E, M.D.B. & M. (Assessors Parcel Number: 99-290-17).



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The Permittee has submitted a revised Resource Conservation and Recovery Act (RCRA) Part B Permit Application dated July 17, 1991, to the Department of Toxic Substances Control (hereinafter called the Department) for review. The Department has reviewed the RCRA Part B Permit Application and has determined in a letter dated August 10, 1995, that the RCRA Part B Permit Application is complete. By issuance of this Permit, the RCRA Part B Permit Application is approved.

The following is a list of documents which constitute the Approved RCRA Part B Permit Application:

1. "Laidlaw Environmental Services (Lokern), Inc., RCRA Part B Application, Volumes 1 Through 5", dated July 17, 1991, including revision #1 (6/10/92), #2 (11/13/92) and #3 (5/26/95);
2. "Revised Monitoring System Plan, Laidlaw Environmental Services (Lokern), Inc., Volumes 1 Through 5", dated December 27, 1991, including revision #1 (6/10/92), #2 (11/13/92) and #3 (5/26/95); and
3. "Unit Specific Closure Plans, Existing RCRA Surface Impoundments Volume I, Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I, II, III and IV", dated March 8, 1991, including revision #1 (6/10/92), #2 (11/13/92) and #3 (5/26/95).

The Permittee shall perform the hazardous waste management activity authorized by this Permit in accordance with the Approved RCRA Part B Permit Application.

The provisions and conditions of this Permit are severable, and if any provision or condition of this Permit or the application of any provision or condition of this Permit to any circumstance is held invalid, the application of such provision or condition to other circumstances and the remainder of this Permit shall not be affected thereby.



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The Department's issuance of this Permit does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. Unless otherwise specifically provided in this Permit, the Permittee shall comply with the provisions of Chapter 6.5 of Division 20 of the H&S Code and 22 CCR, Division 4.5.

The Department's issuance of this Permit does not prevent the Department from adopting or amending regulations or issuing orders imposing requirements which are in addition to or more stringent than those in existence at the time this Permit was issued. The Permittee shall comply with any such additional or more stringent requirements in addition to the requirements and conditions specified in this Permit.

Where appropriate, this Permit is subject to H&S Code Sections 25159.5 and 25159.6, relating to incorporation of federal regulations into state regulations.

In accordance with 22 CCR 66270.1(d), Waste Discharge Requirements, Order No. 89-150, issued to Laidlaw Environmental Services (Lokern), Inc., on August 29, 1989, by the California Regional Water Quality Control Board - Central Valley Region (hereinafter referred to as the CVRWQCB or Regional Board) are incorporated by reference into the Permit. Subsequent Waste Discharge Requirements issued to Laidlaw Environmental Services (Lokern), Inc., during the term of this Permit shall also be incorporated by reference into the Permit.

The Department finds this Permit to be in compliance with the California Environmental Quality Act (CEQA). A Draft Supplemental Environmental Impact Report (SEIR) (SCH #92042028) was prepared by Ogden Environmental and Energy Services Co., Inc., for use by the Kern County Planning Department as part of the review process for the Conditional Use Permit adopted by the Kern County Board of Supervisors on December 12, 1994, pursuant to resolution number 94-684, including General Plan Amendment 3, Map 97 and Conditional Use Permit 4, Map 97. The Final Supplemental Environmental Impact Report (SEIR) was certified on December 12, 1994, by the Kern County Board of Supervisors.

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The Hazardous Waste Facility Permit, dated January 1991, Modification 2, issued to the Permittee by the Department of Health Services, is revoked and reissued in accordance with 22 CCR 66270.41.

This Permit becomes effective as provided by 22 CCR 66271.14(b).

This Permit shall remain in effect for ten years from the effective date of the Permit unless revoked and reissued, terminated, or continued in accordance with 22 CCR Sections 66270.30(b), 66270.41, 66270.43, 66270.50, 66271.4(a) and 66271.14(b).

*James M. Pappas*

James M. Pappas, P.E.  
Chief  
Facility Permitting Branch

*March 7, 1996*

Date

Attachment



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**ATTACHMENT A**

**Part I. Standard Conditions**

**A. Duty to Comply**

The Permittee shall comply with all conditions of this Permit.  
[22 CCR 66270.30(a)]

**B. Duty to Reapply**

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new permit.  
[22 CCR 66270.30(b)]

**C. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [22 CCR 66270.30(c)]

**D. In the Event of Noncompliance with the Permit**

The Permittee shall take all reasonable steps to minimize or correct releases to the environment and shall carry out all measures as are reasonable to prevent and correct adverse impacts on human health or the environment. [22 CCR 66270.30(d)]

**E. Proper Operation and Maintenance**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [22 CCR 66270.30(e)]

F. Permit Actions

This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [22 CCR 66270.30(f)]

G. Property Rights

This Permit does not convey any property rights of any sort or any exclusive privilege. [22 CCR 66270.30(g)]

H. Duty to Provide Information

The Permittee shall furnish to the Department, within a reasonable time, not to exceed 30 days unless a time extension is approved by the Department, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Department upon request, copies of records required to be kept by this Permit. [22 CCR 66270.30(h)]

I. Inspection and Entry

The Permittee shall allow an authorized representative of the Department, the State Water Resources Control Board or the Regional Water Quality Control Board, upon the presentation of credentials and other documents as may be required by law to:

1. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit; [22 CCR 66270.30(i)(1)]
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit; [22 CCR 66270.30(i)(2)]
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Permit; and [22 CCR 66270.30(i)(3)]
4. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by law, any substances or parameters at any location.



**J. Monitoring and Records**

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. [22 CCR 66270.30(j)(1)]
2. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, the certification required by section 66264.73(b)(9), and records of all data used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. The Permittee shall maintain records from all groundwater monitoring wells and associated ground water surface elevations for the active life of the Facility and for the post-closure care period. [22 CCR 66270.30(j)(2)]
3. Records of monitoring information shall include:
  - a. The date, exact place and time of sampling or measurements; [22 CCR 66270.30(j)(3)(A)]
  - b. The name(s) of the individual(s) who performed the sampling or measurements; [22 CCR 66270.30(j)(3)(B)]
  - c. The date(s) analyses were performed; [22 CCR 66270.30(j)(3)(C)]
  - d. The name(s) of the individual(s) who performed the analyses; [22 CCR 66270.30(j)(3)(D)]
  - e. The analytical techniques or methods used; and [22 CCR 66270.30(j)(3)(E)]
  - f. The results of such analyses. [22 CCR 66270.30(j)(3)(F)]

**K. Signatory Requirements**

All applications, reports or information submitted to the Department shall be signed and certified pursuant to 22 CCR 66270.11(d). [22 CCR 66270.30(k)]

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L. Reporting Requirements

1. Planned changes

The Permittee shall give notice to the Department as soon as possible and at least 30 days in advance of any planned physical alterations or additions to the permitted facility. [22 CCR 66270.30(l)(1)]

2. Anticipated noncompliance

The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with Permit requirements. For a new facility, the Permittee shall not transfer, treat, store, or dispose of hazardous waste; and for a facility being modified, the Permittee shall not transfer, treat, store, or dispose of hazardous waste in the modified portion of the facility except as provided in section 66270.42, until: [22 CCR 66270.30(l)(2)]

a. The Permittee has submitted to the Department by certified mail or hand delivery a letter signed by the Permittee and a professional engineer, registered in California, stating that the Facility has been constructed or modified in compliance with the Permit; and

b. (1) The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the Permit; or

(2) If within 15 days of the date of submission of the letter in subsection L.2.a. of this section, the Permittee has not received notice from the Department of the Department's intent to inspect, prior inspection is waived and the permittee may commence transfer, treatment, storage, or disposal of hazardous waste.

3. Transfer of permit

This Permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements pursuant to 22 CCR 66270.40.  
[22 CCR 66270.30(l)(3)]



4. Monitoring reports

Monitoring results shall be reported at the intervals specified elsewhere in this Permit. [22 CCR 66270.30(l)(4)]

5. Compliance reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 14 days following each schedule date. [22 CCR 66270.30(l)(5)]

6. Twenty-four hour reporting

a. The Permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the Permittee becomes aware of the circumstances, including:

- (1) Information concerning a release or discharge of hazardous waste that may cause an endangerment to public drinking water supplies; [22 CCR 66270.30(l)(6)(A)(1)]
- (2) Any information of a release or discharge of hazardous waste or of fire or explosion from the hazardous waste facility which could threaten the environment or human health outside the Facility. [22 CCR 66270.30(l)(6)(A)(2)]

b. The description of the occurrence and its cause shall include:

- (1) Name, address, and telephone number of the owner or operator;
- (2) Name, address, and telephone number of the Facility;
- (3) Date, time, and type of incident;
- (4) Name and quantity of material(s) involved;
- (5) The extent of injuries, if any;
- (6) An assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable; and



- (7) Estimated quantity and disposition of recovered material that resulted from the incident.
  - c. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Department may waive the 5-day written notice requirement in favor of a written report within 15 days.
7. Manifest discrepancy report

If a significant discrepancy in a manifest is discovered, the Permittee shall attempt to reconcile the discrepancy. If not resolved within fifteen days, the Permittee shall submit a letter report, including a copy of the manifest, to the Department pursuant to 22 CCR 66264.72. [22 CCR 66270.30(l)(7)]
8. Unmanifested hazardous waste report

This report shall be submitted to the Department within 15 days of receipt of unmanifested waste pursuant to 22 CCR 66264.76. [22 CCR 66270.30(l)(8)]
9. Annual report

An annual report shall be submitted to the Department covering facility activities during the previous calendar year unless otherwise waived by the Department, pursuant to 22 CCR 66264.75. [22 CCR 66270.30(l)(9)]
10. Other noncompliance

The Permittee shall report all instances of noncompliance not reported under I.L.4, I.L.5, and I.L.6., of this subpart, at the time monitoring reports are submitted. The reports shall contain the information listed in subpart I.L.6., of Part I. [22 CCR 66270.30(l)(10)]

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11. Other information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information. [22 CCR 66270.30(l)(11)]

Part II. General Facility Standards

A. Financial Responsibility Requirements

1. The Permittee shall establish and demonstrate to the Department financial assurance for closure of the Facility. The Permittee shall choose from the options specified in 22 CCR 66264.143(a) through (i) or 22 CCR 66264.146. [22 CCR 66264.143]
2. The Permittee submitted to the Department for review closure and post-closure cost estimates which are contained in Chapter 8.0 of the Approved RCRA Part B Permit Application. The Permittee has established a Captive Insurance financial instrument through the National Insurance and Indemnity Corporation located in the state of Vermont. The financial instrument was approved by the Department on July 26, 1995, in the amount of \$29, 133,892.00 (\$21,757,387 for closure and \$7,376,505 for post-closure) and fully funds the approved closure and post-closure cost estimates in accordance Part II.A.1. and II.A.6. of this Permit. This financial instrument shall remain in effect unless regulatory requirements mandate a change or the Permittee requests approval of an alternate financial instrument in the form of a letter of acceptance. [H&S Code 25202 and 22 CCR 66264.142(a)]
3. The Permittee may request a reduction of the amount of closure funding in the established financial assurance instrument after the Department has reviewed and approved the closure certification report for any waste management unit at the Facility. [H&S Code 25202 and 22 CCR 66264.143]
4. The Permittee shall revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The Permittee shall adjust the closure cost estimate for inflation and shall submit the adjusted cost estimate to the Department by March 1st of each year for review and approval in the form of a letter of acceptance. [22 CCR 66264.142(b)]
5. The Permittee shall keep a copy of the following at the Facility during the operating life of the Facility: the latest closure cost estimate prepared in accordance with 22 CCR 66264.142(a) and (c) and, when this estimate has been adjusted in accordance with 22 CCR 66264.142(b), the latest adjusted closure cost estimate. [22 CCR 66264.142(d)]



6. The Permittee shall establish and demonstrate to the Department financial assurance for post-closure care of the Facility. The Permittee shall choose from the options specified in 22 CCR 66264.145(a) through (g). [22 CCR 66264.145]
7. The Permittee shall revise the post-closure cost estimate whenever a change in the post-closure plan increases the cost of post-closure. The Permittee shall adjust the post-closure cost estimate for inflation and submit the adjusted cost estimate to the Department by March 1st of each year during the operating life of the Facility as specified in 22 CCR 66264.144(b). [22 CCR 66264.144(b)]
8. The Permittee shall keep a copy of the following at the Facility during the operating life of the Facility: the latest post-closure cost estimate prepared in accordance with 22 CCR 66264.144(a) and (c) and, when this estimate has been adjusted in accordance with 22 CCR 66264.144(b), the latest adjusted post-closure cost estimate. [22 CCR 66264.144(d)]
9. The Permittee shall have and maintain liability coverage for sudden accidental occurrence in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated by the options listed in 22 CCR 66264.147(a). [22 CCR 66264.147(a)]
10. The Permittee shall have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence, with an annual aggregate of at least \$6 million, exclusive of legal defense costs. This liability coverage may be demonstrated by the options listed in 22 CCR 66264.147(b). [22 CCR 66264.147(b)]
11. The Permittee shall continuously provide liability coverage for the Facility as required by Permit conditions II.A.9. and II.A.10. until certifications of closure of the facility, as specified in 22 CCR 66264.143(j)(1), are received by the Department. [22 CCR 66264.147(f)]

B. Waste Analysis

1. The Permittee submitted to the Department a waste analysis plan which is contained in Chapter 3.0 of the Approved RCRA Part B Permit Application, hereinafter called the Waste Analysis Plan (WAP), to meet the requirements of 22 CCR 66270.14(b)(2) and 22 CCR 66264.13(b) and (c). The Permittee shall implement the provisions of the WAP. The Permittee shall keep a copy of the WAP at the Facility. [22 CCR 66264.13(b) and (c)]
2. The Permittee shall require a generator to provide on the Generator's Waste Material Profile Form (Profile), or on an equivalent form, a description of the contents of an overpack drum (lab pack) and certify that the overpack drum meets the requirements of 22 CCR 66264.316. [22 CCR 66264.13(a)]
3. The Permittee shall require each generator to submit a Profile describing their waste. The Permittee shall rely on generator knowledge of the waste and conduct the appropriate supplemental analysis to ensure that waste received at a hazardous waste management unit meets the acceptance criteria for that unit and any other criteria specified in the operation plan for the unit. Waste that does not meet any acceptance criteria for a unit may be accepted at the unit on a case-by-case basis provided that: the Permittee conducts all the supplemental analyses applicable to the unit, the results of the analyses indicate that the waste may be accepted at the unit without violating any other condition of the Permit, and the results of the analyses and the decision to accept the waste at the unit are documented in the operating record. [22 CCR 66264.13(a)]
4. The Permittee shall not change the acceptance criteria of the WAP without approval by the Department. This approval will require a permit modification in accordance with 22 CCR 66270.41 and 66271.4. [22 CCR 66264.13(a)]
5. The Permittee lists hazardous wastes accepted at the Facility in Table 3.1-2 of the WAP. The Permittee shall not accept at the Facility hazardous wastes not listed in Table 3.1-2. For the purposes of this Permit condition, the Permittee may revise Table 3.1-2 to incorporate editorial changes in the hazardous waste codes as these codes are defined in 40 CFR 261, and in 22 CCR, Division 4.5, Chapter 11. For example, if the Permittee currently is permitted to accept a hazardous waste which is given a new code because of a new waste listing by either EPA or the Department, the Permittee may continue to accept the hazardous waste and revise Table 3.1-2 to incorporate the new hazardous waste code. The Permittee shall submit the revised Table 3.1-2 to the



Department within 14 days of the revision. If the Department determines that such newly listed hazardous waste codes cannot be managed at the Facility in accordance with applicable federal and state laws and regulations, the Department shall notify the Permittee and require the Permittee to otherwise properly manage or not accept the waste. All revisions to Table 3.1-2 which are not editorial in nature require a permit modification in accordance with 22 CCR 66270.42 and 66271.4. [H&S Code 25202]

6. Pre-receipt evaluation

The pre-receipt evaluation procedures are used to analyze wastes prior to acceptance at the Facility. The Permittee shall use generator knowledge of the waste and follow the pre-receipt evaluation procedures described in the WAP (Part B, Chapter 3, Section 3.2.4) and the waste analysis conditions specified in this Permit prior to acceptance of such waste at the Facility to obtain knowledge of the waste and its potential for variability. [22 CCR 66264.13]

7. Verification analysis of incoming wastes

The verification analysis (also known as "fingerprint" analysis) of incoming wastes is to verify that wastes delivered to the Facility have the same characteristics as determined by the pre-receipt evaluation.

a. The Permittee shall obtain and analyze:

- (1) Three representative grab samples from each truck containing bulk loads entering the Facility. The Permittee is authorized to composite the samples taken from an incoming waste load into a single sample for purposes of verification analysis. When a bulk truck load is part of a shipment of 10 or more truckloads of the same waste type from a single project and discrete waste profile, the Permittee shall perform pre-acceptance sampling on a minimum of 20% of the total number of incoming truck loads;
- (2) Representative waste samples from a minimum of 10% of the total number of drums and/or containers per discrete waste profile in each single shipment entering the Facility; and



- (3) Representative waste samples from all drums and/or containers entering the Facility listed on a corresponding generator's waste manifest, if analysis results (or any other information) indicate a discrepancy with the waste manifest.
- b. The Permittee shall conduct sampling and analyses to ensure the following:
  - (1) That consistency between waste manifest information and the incoming waste stream is maintained; and
  - (2) That the waste received from a particular generator is the waste expected from the generator.
- c. The Permittee shall either require the generator to obtain and submit *detailed analysis from an independent lab certified in the State of California* or shall sample and conduct the required additional analysis for the generator on the first shipment of each newly approved waste stream pursuant to 22 CCR 66268.7(c)(2) and 66264.13 to verify the generator's compliance with the land disposal restrictions codified in 66268.7(a)(2). [22 CCR 66264.13]

C. Prohibited Wastes

- 1. The Permittee shall not accept the following wastes and materials at the Facility: [H&S Code 25202]
  - a. Radioactive materials which either require special placarding because they exceed 2,000 picocuries/gram of activity as referenced in 49 CFR 173.403(y) or are defined as "NRC regulated source materials" as referenced in H&S Code 25805(m);
  - b. Infectious or bio-hazardous materials [H&S Code 25020.5];
  - c. D.O.T. Class 1 explosives;
  - d. Municipal garbage or refuse (except on-site generated trash);
  - e. Polychlorinated biphenyls (PCBs) greater than 50 parts per million;

- f. Wastes identified by EPA waste codes F020, F021, F022, F023, F026, and F027, as defined in 40 CFR Part 261;
  - g. Bulk or containerized hydrazine, defined in 40 CFR Part 261 as waste code U133; and
  - h. Compressed gas cylinders greater than 1 liter.
2. The total annual tonnage of waste accepted at the Facility is limited to a running five year average of 388,000 tons per year, as analyzed in the SEIR.

D. Security

- 1. The Permittee shall prevent the unknowing entry and minimize the possibility for the unauthorized entry of persons or livestock onto the active portion of the Facility. [22 CCR 66264.14(a)]
- 2. The Permittee shall control entry at all times through the gates and other entrances to the active portion of the Facility. [22 CCR 66264.14(b)(2)(B)]
- 3. The Permittee shall post a sign as described in 22 CCR 66264.14(c) at each entrance to the active portion of the Facility and around the perimeter of the Facility with a spacing of no greater than 400 feet. [22 CCR 66264.14(c)]
- 4. The Permittee shall maintain a chain-link type fence, including during closure and post-closure periods, around the perimeter of the Facility. [22 CCR 66264.14(b)(2)(A)]

E. General Inspection Requirements

- 1. The Permittee shall inspect the Facility for malfunctions and deterioration, operator errors and discharges which may be causing, or may lead to, (1) release of hazardous waste constituents to the environment or (2) a threat to human health. The Permittee shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment. [22 CCR 66264.15(a)]
- 2. The Permittee submitted to the Department an inspection schedule which is contained in Section 5.2 through 5.2.4 and Tables 5.2-1 through 5.2-5 of the Approved RCRA Part B Permit Application, hereinafter called the Inspection



Program, to meet the requirements of 22 CCR 66270.14(b)(5) and 22 CCR 66264.15(b). The Permittee shall implement the provisions of the Inspection Program. The Permittee shall keep a copy of the Inspection Program at the Facility. [22 CCR 66264.15(b)]

3. The Permittee shall remedy any deterioration or malfunction of equipment or structures that are revealed during the course of an inspection. The remediation shall follow a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred remedial action shall be taken immediately. [22 CCR 66264.15(c)]
4. The Permittee shall retain all completed inspection logs, as described in the Inspection Program, in the Facility's operating record. The Permittee shall keep these records for at least three years from the date of the inspection. [22 CCR 66264.15(d)]

F. Personnel Training

1. The Permittee submitted to the Department a personnel training program which is contained in Chapter 7.0 of the Approved RCRA Part B Permit Application, hereinafter called the Training Plan, to meet the requirements of 22 CCR 66270.14(b)(12) and 22 CCR 66264.16. The Permittee shall implement the provisions of the Training Plan. [22 CCR 66264.16]
2. The Permittee shall maintain the following documents and records at the Facility:
  - a. A written job description for each position at the Facility related to hazardous waste management; [22 CCR 264.16(d)(2)]
  - b. The name of the employee filling each position;
  - c. The date the employee started working in the position; and [22 CCR 66264.16(d)(1) and (2)]
  - d. A copy of the attendance sheet used to demonstrate the type of training and the date on which training occurred. [22 CCR 66264.16(d)(4)]



3. Training records on current personnel shall be kept until closure of the Facility; training records on former employees shall be kept for at least three years from the date the employee last worked at the Facility. Personnel training records may accompany personnel transferred within the same company. [22 CCR 66264.16(e)]

G. Requirements for Ignitable, Reactive, or Incompatible Wastes

The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction, including, but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions) and radiant heat. While ignitable or reactive waste is being handled, the Permittee shall confine smoking and open flame to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a possible hazard from ignitable or reactive waste. [22 CCR 66264.17(a)]

H. Seismic and Precipitation Design Standards

1. Except as provided by 22 CCR 66264.175 and 66264.192, cover systems and drainage control systems required by this Permit shall be designed, constructed, and maintained to function without failure when subjected to capacity, hydrostatic, and hydrodynamic loads resulting from a 24-hour probable maximum precipitation storm. [22 CCR 66264.25(a)]
2. The following shall be designed, constructed and maintained to withstand the maximum credible earthquake without compromising the level of public health and environmental protection afforded by the original design:
  - a. All hazardous landfills subject to this Permit, and [22 CCR 66264.25(b)(1)]
  - b. All closure caps and covers and cover systems required by this Permit and all containment and control features which will remain after closure at permanent waste disposal areas. [22 CCR 66264.25(b)(2)]
3. The Permittee submitted a Waste Management Unit (WMU) rainfall management plan entitled "Regulatory Status of Precipitation Run-off" (hereinafter referred to as the Rainfall Plan), prepared by A.T. Kearney Inc.,

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dated April 10, 1991, which was approved by the Department in a letter dated May 10, 1991. The Rainfall Plan is incorporated by reference into this Permit.

The Permittee is authorized to store rainwater removed from the WMUs as described in the Rainfall Plan in portable or temporary tanks (e.g., "Baker Tanks," "Rain-for-Rent," tanks, etc.), provided that safe ingress/egress for the vacuum trucks used to conduct the rainwater transfer is maintained.

I. Preparedness and Prevention

1. The Facility shall be designed, constructed, maintained and operated to minimize the possibility of a fire or explosion or any unplanned, sudden or non-sudden release of hazardous waste or hazardous waste constituents which could threaten human health or the environment. [22 CCR 66264.31]
2. All Facility communication or alarm systems, fire protection equipment, spill control equipment and decontamination equipment shall be tested and maintained to assure its proper operation in time of emergency. [22 CCR 66264.33]
3. Whenever hazardous waste is being poured, mixed, spread or otherwise handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee. [22 CCR 66264.34(a)]
4. In the event that only a single employee is on the premises while the Facility is operating, the employee shall have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance. [22 CCR 66264.34(b)]
5. The Permittee shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the Department that aisle space is not needed for any of these purposes. [22 CCR 66264.35]



6. Where state or local authorities decline to enter into arrangements described in 22 CCR 66264.37(a), the Permittee shall document the refusal in the operating record. [22 CCR 66264.37(b)]

J. Contingency Plan

1. The Permittee submitted to the Department a contingency plan which is contained in Chapter 6.0 of the Approved RCRA Part B Permit Application, hereinafter called Contingency Plan, to meet the requirements of 22 CCR 66270.14(b)(7), 66264.51(a), and 66264.52. The Permittee shall implement the provisions of the Contingency Plan. [22 CCR 66264.51(a) and 66264.52]
2. No later than 90 days after the effective date of this Permit, the Permittee shall prepare and submit a Post-Earthquake Inspection and Response Plan to the Department. This Post-Earthquake Inspection and Response Plan shall be submitted for review and approval to both the Department and the CVRWQCB. This Post-Earthquake Inspection and Response Plan shall be implemented after a reported event of magnitude 6.0 or greater on the Richter Scale occurring within a 50 mile radius of the Facility or if the Facility experiences significant ground motion. This Post-Earthquake Inspection and Response Plan will be reviewed by the Department in a letter of approval or denial, as appropriate and the Permittee shall incorporate the Post-Earthquake Inspection and Response Plan into the Contingency Plan. [22 CCR 66264.51(a)]
3. The provisions of the Contingency Plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment. [22 CCR 66264.51(b)]
4. A copy of the Contingency Plan and all revisions to the plan shall be:
  - a. Maintained at the Facility. [22 CCR 66264.53(a)(1)]
  - b. Submitted to all local police departments, fire departments, hospitals and state and local emergency response teams listed in Table 6.4.1 of the Approved RCRA Part B Permit Application. [22 CCR 66264.53(a)(2)]



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5. Changes to the Contingency Plan of an administrative nature (e.g., name change, phone number, etc.) may be approved by the Department in a letter of acceptance. Subparts II.J.4.a. and b. of this Permit apply to such changes. [22 CCR 66270.42]
6. At all times there shall be at least one employee, either on the Facility premises or on call (i.e., available to respond to an emergency either by reaching the Facility within a short period of time or by directing activities by telephone contact with the Facility), with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the Facility's Contingency Plan, all operations and activities at the Facility, the location and characteristics of waste handled, the location of all records within the Facility, and the Facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the Contingency Plan. [22 CCR 66264.55]
7. The Permittee shall note in the operating record the time, date, and details of any incident that requires implementing the Contingency Plan. Within 15 days after the incident, the Permittee shall submit a written report of the incident to the Department. The report shall include:
  - a. Name, address and telephone number of the Permittee; [22 CCR 66264.56(j)(1)]
  - b. Name, address and telephone number of the Facility; [22 CCR 66264.56(j)(2)]
  - c. Date, time and type of incident (e.g., fire, explosion); [22 CCR 66264.56(j)(3)]
  - d. Name and quantity of material(s) involved; [22 CCR 66264.56(j)(4)]
  - e. The extent of injuries, if any; [22 CCR 66264.56(j)(5)]
  - f. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and [22 CCR 66264.56(j)(6)]
  - g. Estimated quantity and disposition of recovered material that resulted from the incident. [22 CCR 66264.56(j)(7)]

K. Manifest System, Record Keeping and Reporting

1. Upon discovering a significant manifest discrepancy, the Permittee shall attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the Permittee shall immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest at issue.

Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest and the quantity or type of hazardous waste the Facility actually receives. Significant discrepancies in quantity are:

- a. For bulk waste, variations greater than 10 percent in weight or volume.
- b. For containerized waste, any variation in piece count, such as a discrepancy of one drum in a truckload.

Significant discrepancies in waste type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid or toxic constituents not reported on the manifest.  
[22 CCR 66264.72(a)]

2. If a shipment of containerized waste (e.g., drums, tri-wall boxes, supersacks, etc.) arrives at the Facility that has obvious differences in the type of waste when compared to the uniform hazardous waste manifest or profile approval number, the Permittee may store the containers in the Drum Handling and Storage Area (DHSA) at the Stabilization Treatment Unit (STU) for up to 15 days from the date of arrival to reconcile the manifest discrepancy. If the manifest discrepancy with the containers in question is not resolved within 15 days, the Permittee shall make arrangements with the generator to ship the load back to the generator or to an alternative facility within seven (7) days. In addition, the Permittee shall immediately submit to the Department a letter describing the discrepancy and the attempts to reconcile the discrepancy and a copy of the manifest or shipping papers at issue when it is determined that the discrepancy cannot be reconciled.  
[H&S Code 25202 and 22 CCR 66264.72(b)]



3. If the Permittee accepts a load of hazardous waste which is not accompanied by a hazardous waste manifest, an unmanifested hazardous waste report shall be submitted to the Department within 15 days of receipt of unmanifested hazardous waste, as required by 22 CCR 66264.76.  
[22 CCR 66270.30(l)(8) and 66264.76]
4. The Permittee shall keep a written operating record at the Facility. The Permittee may maintain a record on microfilm or equivalent document retrieval system, starting three years after the date of the record. The Permittee shall make available a legible paper copy of any record requested, in a manner consistent with other conditions of this Permit.  
[22 CCR 66264.73(a)]
5. The following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the Facility:
  - a. A description of the quantity of each hazardous waste received and the method(s) and date(s) of its treatment, storage, or disposal at the Facility; [22 CCR 66264.73(b)(1)]
  - b. The location of each hazardous waste within the Facility and the quantity at each location. The location and quantity of each hazardous waste shall be recorded on a map or diagram of each cell or disposal area or the information shall be retrievable from the operating record, at the request of the Department, such that locations can be plotted for discrete hazardous waste records of interest using a combination of horizontal and vertical grid locations. This information shall include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest; [22 CCR 66264.73(b)(2)]
  - c. Records and results of waste analyses performed as specified in 22 CCR 66264.13 and 66264.17; [22 CCR 66264.73(b)(3)]
  - d. Summary reports and details of all incidents that require implementing the contingency plan as specified in 22 CCR 66264.56(j);  
[22 CCR 66264.73(b)(4)]
  - e. Records and reports of inspections as required by 22 CCR 66264.15(d);  
[22 CCR 66264.73(b)(5)]



- f. Monitoring, testing, or analytical data, where required by Part V of the Permit and 22 CCR 66264.226, 66264.303, and 66264.309.  
[22 CCR 66264.73(b)(6)]
  - g. Notices to generators as specified in 22 CCR 66264.12(b).  
[22 CCR 66264.73(b)(7)]
  - h. All closure cost estimates required by 22 CCR 66264.142 and all post-closure cost estimates required by 22 CCR 66264.144.  
[22 CCR 66264.73(b)(8)]
- 6. The Permittee shall furnish upon request and make available at all reasonable times for inspection by any officer, employee, or delegated representatives of the Department, State Board, or CVRWQCB all records, including plans, required by conditions of this Permit. [22 CCR 66264.74(a)]
- 7. The retention period for all records required by conditions of this Permit is extended automatically during the course of any unresolved enforcement action regarding the Facility or as requested by the Department.  
[22 CCR 66264.74(b)]
- 8. Upon closure of the Facility, the Permittee shall submit to the Department, the Regional Board, and the local land authority a copy of the record of waste disposal locations and quantities. [22 CCR 66264.73(b)(2) and 66264.74(c)]
- 9. If the Facility does not accept a shipment of hazardous waste from an off-site source that arrives at the Facility, the Permittee shall send a letter to the Department within seven days. The letter shall include the following information to the extent of the Permittee's knowledge: [H&S Code 25202]
  - a. The EPA identification number, name, and address of the facility;
  - b. The EPA identification number, name, and address of the generator of the waste;
  - c. The EPA identification number, name, and address of the transporter;
  - d. The transporter vehicle license plate number and state and a description of the vehicle;

- e. A description and the quantity of the hazardous waste in the shipment;  
and
  - f. A brief explanation of why the waste shipment was rejected.
10. Unless otherwise specifically required or requested, all information specifically required to be submitted to the Department under conditions of this Permit shall be submitted as follows: [22 CCR 66271.5(c)(4)]
- a. The original document shall be submitted to: Department of Toxic Substances Control, Facility Permitting Branch, Region 1, 10151 Croydon Way, Suite 3, Sacramento, CA 95827. Oral notices and reports shall be made either to the Department of Toxic Substances Control, Region 1, Duty Officer at (916) 255-3618 or to the Facility Permitting Branch project manager for the Facility.
  - b. One copy shall be submitted to: Department of Toxic Substances Control, Statewide Compliance Division, 1515 Tollhouse Road, Clovis, CA 93612. Oral notices and reports shall be made to the Duty Officer, Surveillance and Enforcement Branch, at (209) 297-3901.

The Department will notify the Permittee of changes in this distribution list to correct changes in agency organization, addresses, or telephone numbers.

L. Closure

- 1. The Permittee shall close the Facility in a manner that:
  - a. Minimizes the need for further maintenance. [22 CCR 66264.111(a)]
  - b. Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall or waste decomposition products to the ground or surface waters or to the atmosphere. [22 CCR 66264.111(b)]
- 2. The Permittee submitted to the Department a closure and post-closure plan for the Facility, which is contained in Chapter 8.0 of the Approved RCRA Part B Permit Application, to meet the applicable requirements of 22 CCR



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66270.14(b)(13) and 66264.112 (hereinafter called the Closure Plan and the Post-Closure Plan), respectively. The Department has determined that the Closure Plan and the Post-Closure Plan are consistent with 22 CCR 66264.111, 66264.113, 66264.114, and 66264.115, and the applicable requirements of 22 CCR 66264.178, 66264.197, 66264.228, and 66264.310. The Department approves the Closure Plan as modified by other conditions of this Permit.

3. The Permittee's implementation of the Closure Plan is, however, contingent upon approval of the Closure Plan by the Regional Board pursuant to Section 13227 of the Water Code. The Permittee shall comply with any limitations and requirements imposed by the Regional Board pursuant to Section 13227 of the Water Code. [H&S Code 25205(b) and 25247]
4. The Permittee shall keep a copy of the Closure Plan and all revisions to the Closure Plan at the Facility until closure is completed and certified in accordance with 22 CCR 66264.115. [22 CCR 66264.112(b)]
5. When the closure of each unit and the ultimate facility closure is completed, the Permittee shall submit to the Department certification both by the Permittee and by an independent, qualified professional engineer, registered in California, that the unit or Facility has been closed in accordance with the specifications in the appropriate closure plan approved by the Department. Closure certification is required for closure of units at the Facility ("partial closure") and for closure of the Facility at the end of its operating life ("ultimate Facility closure" as defined in the Closure Plan). The certification must include a report that describes closure activities in sufficient detail to demonstrate to the Department that the construction methods and materials approved by the Department were used to complete the closure work. The report must include a description and justification of any minor modifications to approved plans, specifications, and procedures. The certification of the ultimate Facility closure must include a certification that each previously closed unit continues to meet the closure performance standard defined in 22 CCR 66264.111, as originally met by implementing the approved closure plans and specifications. Whenever feasible, the independent engineer certifying the closure shall be the engineer responsible for directly implementing the construction quality assurance plan during closure activities.  
[22 CCR 66264.115]



M. Post-Closure

1. The Permittee shall conduct post-closure care of the Facility for a minimum of 30 years after the date of completing ultimate closure of the Facility. Immediately following the completion of each partial closure, the Permittee shall initiate post-closure care and monitoring of the closed units. [22 CCR 66264.117(b)(1)]
2. The Permittee submitted to the Department a post-closure monitoring plan, which is contained in Section 8.2 of the Approved RCRA Part B Permit Application, to meet the post-closure requirements of 22 CCR 66270.14(b)(13) and 66264.118(a). The Permittee shall perform post-closure care activities in accordance with the provisions of the Post-Closure Plan or subsequent revisions to the Post-Closure Plan approved by the Department. [22 CCR 66264.117(e) and 66264.118(a)]
3. The Department's approval of the Post-Closure Plan is contingent upon approval of the Post-Closure Plan by the Regional Board pursuant to Section 13227 of the Water Code. The Permittee shall comply with any limitations and requirements imposed by the Regional Board pursuant to Section 13227 of the Water Code. [H&S Code 25205(b) and 25247]
4. The Permittee shall keep a copy of the Post-Closure Plan and all revisions to the Post-Closure Plan at the Facility until the post-closure care period begins. [22 CCR 66264.118(c)]
5. The Permittee shall apply, as necessary, additional topsoil, grass seed, fertilizer, water, and natural or synthetic erosion control materials in order to establish and maintain adequate vegetative cover upon all landfill closure areas. [H&S Code 25202, 22 CCR 66264.117, 40 CFR 264.117 and 264.310]

N. Site Construction Activities

1. The Permittee shall follow the construction procedures and design specifications contained in the Approved RCRA Part B Permit Application when performing any new waste management unit construction or closure construction related activity at the Facility. [H&S Code 25202 and 22 CCR 66271.5(c)(4)]



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2. The Permittee shall submit to the Department, if necessary, a project-specific addendum which describes and justifies any proposed deviations from the waste management unit construction plans and specifications contained in the Approved RCRA Part B Permit Application. The Department will review the project-specific addendum in accordance with 22 CCR 66270.41 and 66271.4, to determine whether a permit modification is necessary. If the Permittee fails to get prior written approval from the Department for construction methods which deviate from those described in the technical reports cited above, the Department may refuse to accept the Permittee's certification of construction. The Department will refuse to accept the Permittee's certification of construction if the construction methods are unacceptable or if the changes in the plans and specifications require a permit modification.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
3. The Department will allow the Permittee to make minor modifications to design plans, specifications, and QA/QC procedures without prior approval by the Department, provided that the modifications meet the following three conditions:
  - a. The modification will in no way affect the performance standard or the original intent of the plans and specifications approved by the Department.
  - b. The modifications in no way reduce the effectiveness of the QA/QC effort used to ensure the quality and consistency of the materials and workmanship used to meet the performance standards in the plans and specifications approved by the Department.
  - c. All minor modifications to the plans, specifications, and QA/QC documents are clearly identified, described and justified in the construction certification report and as-built drawings submitted for the Department's review and approval following completion of the construction activities.

If the Permittee is unsure whether or not the Department might consider any proposed modification to the plans, specifications, or QA/QC documents to be minor, it is the Permittee's responsibility to communicate the proposed minor modifications to the appropriate project manager for an opinion, prior to implementing the modification. The Department shall issue this opinion in a letter of acceptance or denial, as appropriate. When minor field modifications

are necessary, the Permittee shall notify the Department of these minor modifications not later than seven (7) days after such minor modifications are determined by the Permittee to be necessary. [H&S Code 25202]

4. The Department reserves the right to decide whether any plans and specifications submitted by the Permittee for the Department's review and approval have not received adequate review by the public and require a modification to the permit. The Department will decide whether the public had adequate opportunity to review and comment upon a particular set of plans and specifications only after these documents are received and compared to the plans and specifications available for public review during the comment period for the draft permit. [H&S Code 25202 and 22 CCR 66270.41]

O. Requirements to Mitigate Disturbance of Endangered Species

A biological opinion was completed by the U.S. Fish & Wildlife Service for the Facility. As a result, the Permittee developed a protocol for the capture and handling of endangered or threatened species in consultation with the U.S. Fish & Wildlife Services and the California Department of Fish and Game. This protocol is contained in Chapter 12.0 of the Approved RCRA Part B Permit Application. The Permittee shall comply with the requirements of the biological opinion issued by the U.S. Fish & Wildlife Service for the Facility. In addition, the Permittee shall comply with the requirements of any future biological opinion issued by U.S. Fish & Wildlife Service for the Facility. The Permittee shall send a copy of any new biological opinion issued to the Facility to the Department.  
[H&S Code 25159.5(b) and 22 CCR 66270.3(c)]

P. Aerial Photography for Historical Documentation

The Permittee shall submit an annual color aerial photograph of the active portion of the Facility to the Department no later than July 1st of each year. The photograph shall be of a scale not to exceed 1"=300'. [H&S Code 25202]

Q. Waste Minimization

The Permittee shall annually certify, in accordance with 22 CCR 66270.11, the following information:



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- a. The Permittee has established a program to reduce the volume or quantity and toxicity of hazardous waste generated at the Facility to the degree, determined by the Permittee, to be economically practicable;
- b. The proposed method of treatment, storage, or disposal of the hazardous waste generated at the Facility is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and environment.

The Permittee shall make this certification by March 31st of each year. The Permittee shall submit the certification to the Department and shall record and maintain the certification in the Operating Record.  
[H&S Code 25202 and 25202.9]

R. Other Requirements

1. The Permittee submitted a waste staging plan for wastes treated in the Stabilization Treatment Unit entitled "Supplemental Landfill Operations Plan; Staging of Treated Wastes Processed for the Stabilization Treatment Unit (STU)", dated September 20, 1990, which is incorporated by reference into this Permit. For the purpose of this condition only, "Bin" includes prefabricated or fabricated in place receptacles, either disposable or reusable, as described in the aforementioned document. The Permittee shall not mix wastes from more than one stabilization batch in a waste curing area prior to post-treatment verification analysis that the wastes meet all applicable land disposal restriction requirements. For this Permit condition only, a stabilization batch is a quantity of waste treated in a specific stabilization unit during a single process operation. If more than one stabilization batch of waste is stored in a waste curing area prior to post-treatment verification analysis that the wastes meet all applicable land disposal restriction requirements, the following conditions must be met:
  - a) The waste must be stored in a waste curing area bin of sufficient strength to hold waste;
  - b) The waste curing bins shall be constructed without gaps and be sealed and/or lined to preclude the release of waste;
  - c) The waste curing bins must be marked for easy identification and tracking of the waste;

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- d) The waste curing bins must not be stacked more than one high; and
  - e) The waste curing bins must be securely covered with a rainproof material or securely closed.
- 2. The Permittee shall operate no more than one STU unit (i.e., auger shredder or pug mill) at any one time. The Permittee shall maintain documentation in the operating record for the STU to verify compliance with this condition.
  - 3. Any trucks, trailers or other devices containing hazardous waste bulk solids and/or sludge must be securely covered prior to being parked inside the Facility overnight; any such trucks, trailers or other devices must be parked in a designated parking area in such a manner that precludes interference with emergency response vehicles or activities.



Part III. Storage and Treatment Standards

A. Use and Management of Containers

1. If a container holding hazardous waste is not in good condition (e.g., severe corrosion, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from the defective container to a container that is in good condition or manage the waste in some other way that complies with the requirements of this Permit. [22 CCR 66264.171]
2. The Permittee shall use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired. [22 CCR 66264.172]
3. A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove waste. [22 CCR 66264.173(a)]
4. A container holding hazardous waste shall not be opened, handled or stored in a manner which may rupture the container or cause it to leak. [22 CCR 66264.173(b)]
5. Run-on into a containment system shall be prevented unless the collection system has sufficient excess capacity, in addition to that required by 22 CCR 66264.175(b)(3), to contain any run-on which might enter the system from a 24-hour, 25-year storm. [22 CCR 66264.175(b)(4)]
6. Spilled or leaked waste and accumulated precipitation shall be removed from a sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system. [22 CCR 66264.175(b)(5)]
7. Containers holding ignitable or reactive waste shall be located at least 15 meters (50 feet) from the Facility's property line. [22 CCR 66264.176]
8. Incompatible wastes or incompatible wastes and materials shall not be placed in the same container unless the Permittee complies with 22 CCR 66264.17(b) and (c). [22 CCR 66264.177(a)]

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9. Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material. [22 CCR 66264.177(b)]
10. A storage container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks or surface impoundments shall be separated from the other materials or protected from them by means of a dike, berm, wall or other device. [22 CCR 66264.177(c)]
11. At closure, all hazardous waste and hazardous waste residues shall be removed from the containment system. Remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues shall be decontaminated or removed. [22 CCR 66264.178]
12. A container holding hazardous waste placed in the Drum Handling and Storage Area (DHSA) located at the Stabilization Treatment Unit (STU) for storage prior to subsequent treatment, transfer, and/or disposal at the STU shall be labeled or marked in such a manner as to readily identify its contents. Specifically, when the Permittee decides to accept a shipment of containers holding hazardous waste and place the containers into storage, the Permittee shall at a minimum label or mark with the following information:
  - a. The manifest document number or the Generator's Waste Profile number (or other identifying information) which serve to identify the hazardous waste; and
  - b. Containers holding land disposal restricted hazardous waste shall also be labeled or marked with the date that storage or accumulation starts at the Facility. [H&S Code 25202 and 22 CCR 66268.50(a)(2)(A)]

**B. Container Storage Area**

1. The Department approves the construction plans and specifications for the Container Storage Area. Except as otherwise required elsewhere in this Permit, the Permittee shall construct, operate and maintain the container storage area in accordance with Section 4.3 of the Approved RCRA Part B Permit Application. No later than 90 days from the effective date of this permit, Laidlaw shall submit to the Department a modification to the



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construction requirements for the Container Storage Area as described on page 2-8 of the Approved Part B application to agree with the construction requirements contained in Chapter 4.3 of the Approved Part B application. [H&S Code 25202 and 22 CCR 66271.5(c)(4)].

2. The Permittee shall provide a construction schedule to the Department for construction of the Container Storage Area 30 days before construction begins. [H&S Code 25202]
3. Upon completion of construction of any phase of the Container Storage Area, the Permittee shall submit to the Department a construction certification report. The construction certification report shall contain at a minimum as-built drawings demonstrating that the newly constructed portion of the Container Storage Area was constructed in accordance with the approved design plans and construction specifications. These documents shall be approved or denied by the Department in a letter of approval or denial, as appropriate. [H&S Code 25202, 22 CCR 66271.5(c)(4)]
4. The Permittee is prohibited from storing drums, supersacks and tri-wall boxes in the Container Storage Area. [H&S Code 225202, 22 CCR 66271.5(c)(4)]
5. The Permittee may store waste in the Container Storage Area for up to one year. [H&S Code 225202 and 22 CCR 66268.50(b)]
6. All containers and tanks holding hazardous waste placed in the Container Storage Area shall be labeled or marked at a minimum with the following information:
  - a. The manifest document number or the Generator's Waste Profile number (or other identifying information) which serve to identify the hazardous waste;
  - b. The physical state (e.g., solid, liquid, or sludge); and
  - c. The type of hazardous waste (e.g., soil contaminated with lead, leachate, storm water run-off, etc).

Containers holding land disposal restricted hazardous waste shall also be labeled or marked with the date that storage or accumulation starts at the Facility. [H&S Code 25202 and 22 CCR 66268.50(a)(2)(A)]

7. The Permittee shall store precipitation collected in the sump(s) of the Container Storage Area in a portable tank in the Container Storage Area. The Permittee shall analyze the rain water and manage it according to its characteristics. If the analysis demonstrates that the collected rain water is nonhazardous, the Permittee may discharge the collected rain water to a nonhazardous surface impoundment. [H&S Code 25202]

C. Management of Hazardous Waste in Tanks

1. Tanks shall have sufficient shell strength and for closed tanks pressure controls (e.g., vents) to assure that they do not collapse or rupture.  
[22 CCR 66264.191(a), and 66264.192(a)]
2. Run-on into a secondary containment system for tanks shall be prevented unless the collection system has sufficient excess capacity, in addition to that required in 22 CCR 66264.193(e)(1)(A), to contain any run-on which might enter the system from a 24-hour, 25-year storm.  
[22 CCR 66264.193(e)(1)(B)]
3. Spilled or leaked waste and accumulated precipitation shall be removed from the sump or collection area within 24 hours , or in as timely a manner as is necessary to prevent overflow of the collection system.  
[22 CCR 66264.193(c)(4)]
4. Hazardous wastes and other materials (e.g., treatment reagents) shall not be placed in a tank system if they cause the tank, its ancillary equipment or the containment system to rupture, leak, corrode or otherwise fail.  
[22 CCR 66264.194(a)]
5. The Permittee shall use appropriate controls and practices to prevent spills and overflows of the tank or containment system. These include at a minimum:
  - a. Spill prevention controls (e.g., check valves, dry disconnect couplings);  
[22 CCR 66264.194(b)(1)]
  - b. Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff or bypass to a standby tank); and  
[22 CCR 66264.194(b)(2)]



- c. Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation from a 24-hour, 25-year storm. [22 CCR 66264.194(b)(3)]
- 6. At closure of a tank system, the Permittee shall remove or decontaminate all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated soils and structures and equipment contaminated with hazardous waste or materials and manage them as hazardous waste. [22 CCR 66264.197]
- 7. Ignitable or reactive waste shall not be placed in a tank unless:
  - a. The waste is treated, rendered or mixed before or immediately after placement in the tank so that:
    - (1) The resulting waste, mixture or dissolution of material no longer meets the definition of ignitable or reactive waste under 22 CCR 66261.21 or 22 CCR 66261.23 and [22 CCR 66264.198(a)(1)(A)]
    - (2) The Permittee complies with 22 CCR 66264.17(b) and (c); or [22 CCR 66264.198(a)(1)(B) and 66264.17(c)]
  - b. The waste is transferred, stored or treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react; or [22 CCR 66264.198(a)(2)]
  - c. The tank is used solely for emergencies. [22 CCR 66264.198(a)(3)]
- 8. The Permittee shall comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1981) or the applicable tables in the most recent revision for covered tanks at the Facility which treat or store ignitable or reactive waste. [22 CCR 66264.198(b)]
- 9. Incompatible wastes or incompatible wastes and materials shall not be placed in the same tank system unless 22 CCR 66264.17 (b) is complied with. [22 CCR 66264.199(a)]

10. Hazardous waste shall not be placed in a tank that has not been decontaminated and that previously held an incompatible waste or material unless 22 CCR 66264.17(b) is complied with. [22 CCR 66264.199(b)]

D. Stabilization Treatment Unit

1. Except as otherwise required elsewhere in this Permit, the Permittee shall operate and maintain the STU as described in Section 4.2 of the Approved RCRA Part B Permit Application.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
2. The Permittee may make the following modifications to the existing permitted STU as described in Section 4.2 of the Approved RCRA Part B Permit Application:
  - a. Construct all or part of the Phase II wastewater treatment process;
  - b. Construct a second auger shredder or the previously approved pugmill treatment system as well as necessary bulk waste and drum elevator/conveyor feed system for the existing or second mixing unit;
  - c. Convert the clean water tank to a dirty water storage tank.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
3. The Permittee shall provide a construction schedule to the Department for the items listed in Subpart III.D.2., 30 days before construction begins.  
[H&S Code 25202]
4. Upon completion of construction of any of the items listed in Subpart III.D.2., the Permittee shall submit to the Department for review and approval a construction certification report. The construction certification report shall contain at a minimum as-built drawings demonstrating that the newly constructed portion of the Phase II wastewater treatment plant, STU or Pug Mill was constructed in accordance with the approved design plans and construction specifications. These documents shall be approved or denied by the Department in a letter of approval or denial, as appropriate.  
[H&S Code 25202, 22 CCR 66271.5(c)(4) and 66270.30(l)(2)(A)]



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5. Once the Department has reviewed and approved the construction certification reports for the equipment and processes listed in Subpart III.D.2., the Permittee shall operate the items listed in Subpart III.D.2. in accordance with Section 4.2 of the Approved RCRA Part B Permit Application. [H&S Code 25202 and 22 CCR 66271.5(c)(4)]
6. Except as otherwise required elsewhere in this Permit, the Permittee shall close the STU in accordance with Chapter 8.0 of the Approved RCRA Part B Permit Application. [H&S Code 25202 and 66271.5(c)(4)]
7. As new technologies or standards are required by the federal and state regulatory agencies, the STU may be upgraded with new equipment and processes to satisfy the new requirements. The changes will require written approval from the Department and may also require a modification to this Permit. [22 CCR 66270.32(b)(1), 66270.41, and 66270.42]

Part IV. Land Disposal Standards

A. Landfills

1. Except as otherwise required elsewhere in this Permit, the Permittee shall design, construct, perform construction quality assurance, operate, maintain and monitor all landfills as described in Section 4.1 of the Approved RCRA Part B Permit Application. [H&S Code 25202 and 22 CCR 66271.5(c)(4)]
2. Landfill identification
  - a. There are two existing permitted landfills at the Facility: Waste Management Units (WMUs) 28 and 33. WMU 34, the third landfill, is permitted and under construction. The Permittee shall operate WMUs 28 and 33 in accordance with this Permit. The Permittee shall operate WMU 34, once constructed, in accordance with this Permit.
  - b. The Permittee proposes to construct WMU 35 in multiple separate cells, which will vary in size and capacity. The Permittee shall construct, operate, and close each cell of WMU 35 in accordance with this Permit. [H&S Code 25202 and 22 CCR 66271.5(c)(4)]
  - c. The Permittee shall only dispose of waste in landfills WMU 28, WMU 33, WMU 34 and WMU 35. The Permittee shall not place waste in landfill WMU 34 and WMU 35 until the Department has reviewed and approved the construction certification reports and as-built drawings for these landfills. The Department's approval for waste placement into either WMU 34 or any cell of WMU 35 will not require a permit modification. The Department shall review the certification reports and as-built drawings and either accept or reject them in a letter of acceptance or denial, as appropriate.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
3. Design and construction requirements
  - a. The Permittee shall construct, maintain, and operate Leachate Collection and Removal Systems (LCRS) as described in Chapter 4 of the Approved RCRA Part B Permit Application to detect, collect and remove leachate from the landfill.  
[22 CCR 66271.5(c)(4) and 66264.301(a)(2)]



- b. The Permittee shall construct, operate and maintain run-on and run-off control systems as described in Section 4.1 of the Approved RCRA Part B Permit Application.  
[22 CCR 66271.5(c)(4) and 66264.301(f), (g), and (h)]
- c. The Permittee shall construct WMU 34 and 35 in accordance with the construction specification contained in Section 4.1 of the Approved RCRA Part B Permit Application.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
- d. The Permittee shall notify the Department in writing of the anticipated construction start date of each cell of WMU 35 at least 60 days before final grading of the subgrade foundation. At least 180 days prior to final grading of the subgrade foundation, the Permittee shall request clarification from the Department concerning the previously approved design and construction specifications for WMU 35. It is possible that new design and construction technologies will emerge during the phased construction of WMU 35. Should a modification to the approved design and specifications become necessary to take advantage of new technologies, the Department will review the modification and issue a letter of approval or denial or a permit modification, as appropriate.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
- e. During new or closure construction of any WMU, when requested by the Department, the Permittee shall obtain and provide samples of geosynthetic construction materials to the Department for subsequent testing or archive purposes. The Department may independently obtain and test samples of clay or other soil construction materials. Geosynthetic and clay liner material sampling and field testing shall be within the current construction phase area, defined as that portion of the new construction that has not yet passed Construction Quality Assurance (CQA) testing.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
- f. Upon completion of liner system construction of WMU 34 and any cell in landfill WMU 35, the Permittee shall submit a construction certification report and as-built drawings to the Department for review and approval. The construction certification report shall include the following: [H&S Code 25202 and 22 CCR 66271.5(c)(4)]

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- (1) A summary of the procedures, methods and materials used to construct the unit or cell;
  - (2) Quality assurance test results on geosynthetics and clay liner materials; and
  - (3) Sufficient information for the Department to determine whether each landfill cell was constructed in accordance with the plans and specifications approved by the Department.
- g. The Permittee shall not treat, store, or dispose of hazardous waste in WMU 34 or any cell in WMU 35 until the Permittee has received a written letter of acceptance from the Department for the construction certification report. [22 CCR 66270.30(l)(B)1. and 66271.5(c)(4)]
- h. The construction certification report shall be signed and stamped by a qualified professional engineer registered in California.  
[H&S Code 25202 and 22 CCR 66271.5(c)(4)]
- i. Until the time in which the first quantity of waste is placed in the new landfill or cell, any construction water, clay consolidation water, or rainwater collected and removed from any LCRS of any landfill or cell, may be managed as a non-waste material (i.e., nonpotable water).
- j. Prior to construction of WMU 35 the Permittee shall submit to the Department the following information:
- (1) The brand name and manufacturer of synthetic liners;
  - (2) A plan showing the location of the borrow soil area;
  - (3) Construction specifications for the installation of pumps and liquid sensors for landfill leachate collection and detection systems; and
  - (4) The qualifications of testing and inspection personnel.



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- k. The Permittee may incorporate minor design changes to WMU 35 prior to or during construction pursuant to subpart II.N.3 and II.N.4. of this Permit subject to the following conditions:
  - (1) The revision shall not result in an increase in the design capacity;
  - (2) The revision shall not result in a change of the footprint (i.e. aerial extent or location of WMU 35);
  - (3) The revision shall not result in an increased side slope of WMU 35 (no side slopes  $> 3:1$ );
  - (4) The revision shall not result in an increase in the maximum depth of the unit;
  - (5) The revision shall not result in a change to the typical liner cross section (i.e., location and thickness of liner materials); and
  - (6) The revision shall not result in a decrease in the number of LCRS or LDCRS collection sumps. (i.e., there shall be 8 sumps at a minimum for the unit, with one additional sump for each sub-phase constructed)

4. Landfill operational requirements

- a. The Permittee shall remove liquids from the secondary LCRS and/or Leachate Detection, Collection and Removal System (LDCRS) to minimize the amount of liquid retained, as described in Section 4.1 of the Approved RCRA Part B Permit Application.
- b. The primary LCRS, as described in Section 4.1 of the Approved RCRA Part B Permit Application, shall be operated such that the leachate depth over any part of the liner system does not exceed one foot in depth. Leachate collection sumps are at least two feet deep and are used to collect a sufficient volume of liquid for removal by pumps. The one foot leachate depth requirement does not apply to the primary and secondary LCRS sumps, since they were specifically designed to collect an adequate volume of liquid for efficient pump operation.  
[H&S Code 25202 and 22 CCR 66264.301(c)(2)]

- c. The Permittee submitted a Response Action Plan (RAP) contained in Appendix 4.1.4 and Appendix 4.1.5 of the Approved RCRA Part B Permit Application. Leakage rates described in the RAP shall be calculated on a monthly basis. If the LDCRS exceed the action leakage rate specified in the RAP, the Permittee must perform the following:
  - (1) Within 7 days of the determination, notify the Department in writing of the exceedence;
  - (2) Within 14 days of the determination, submit a preliminary written assessment to the Department which describes the amount of liquid, likely sources of liquid, possible location, size, and cause of any leaks and short-term actions taken and planned to decrease the leakage flow; and
  - (3) Implement the measures specified in the RAP.  
[22 CCR 66264.302(b) and 22 CCR 66264.304(b)]
- d. All liquids pumped out of any LCRS or LDCRS from any cell that has received waste shall be considered by the Permittee to be hazardous waste and shall be managed as F039 waste in accordance with the requirements of this Permit.  
[22 CCR 66271.5(c)(4) and 66261.3(c)(1)]
- e. The Permittee shall apply a clean soil cover daily over exposed wastes within the landfill operations area, to control wind dispersal of particulate matter as required by 22 CCR 66264.301(i). For the purposes of this Permit condition, clean soil means uncontaminated soil or nonhazardous contaminated soil. In lieu of a compacted soil cover, the Permittee may use other appropriate materials (such as polymeric soil sealers or foaming agents) to control wind dispersal of particulate matter within the landfill operations area. [22 CCR 66264.301(i)]
- f. The Permittee shall maintain records documenting the location of waste within all landfills. These records shall include coordinates documenting the location of the waste and maps identifying the coordinate system. [H&S Code 25202 and 22 CCR 66264.309]



- g. The Permittee shall operate and maintain run-on and run-off control systems in accordance with Section 4.1 of the Approved RCRA Part B Permit Application. Rainwater removed from the run-on and run-off control system shall be stored and analyzed. If the analysis demonstrates that the rainwater is nonhazardous, the Permittee may place the rainwater in on-site nonhazardous surface impoundments. Otherwise, the rainwater shall be managed as a hazardous waste depending on the characteristics of the waste.
- h. Except for waste in an overpack drum (lab pack) managed in accordance with 22 CCR 66264.316., the Permittee shall not place ignitable or reactive waste in a landfill. [22 CCR 66264.312]
- i. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in close proximity to each other in any landfill at the Facility. [22 CCR 66264.313]
- j. Unless the waste is in an overpack drum (lab pack) managed in accordance with 22 CCR 66264.316., the Permittee shall not place waste containing free liquids in a landfill at the Facility. This requirement does not apply to those containers holding free liquids as described in 22 CCR 66264.314(c).
- k. The Permittee shall ensure that all containers are either at least 90 percent full when placed in the landfill or are crushed, shredded or similarly reduced in volume to the maximum practical extent before burial in the landfill, as required by 22 CCR 66264.315. This condition does not apply to containers that are very small, such as ampules or to containers designed to hold free liquids for use other than storage such as a battery or capacitor. [22 CCR 66264.315]
- l. The Permittee shall not place overpack drums in the landfill unless the requirements of 22 CCR 66264.316 are satisfied. [22 CCR 66264.316]
- m. The Permittee shall require each waste generator to certify that no biodegradable sorbents are mixed with their wastes pursuant to 22 CCR 66264.314(e) and 66264.13(c)(3). The Permittee shall comply with this condition by requesting this information during the pre-acceptance waste profiling process. [22 CCR 66264.314(e)]

B. Nonhazardous Surface Impoundments

The Permittee shall operate nonhazardous surface impoundments, WMU 18, 21, 22, 23, 27 and 31 in accordance with Waste Discharge Requirements issued by the CVRWQCB and in compliance with the WAP approved by the Department.  
[H&S Code 25202]

C. Closure

1. The Permittee shall continue to clean close existing non-RCRA surface impoundments in accordance with the document entitled "*Unit Specific Closure Plans, Existing Surface Impoundments, Laidlaw Environmental Services (Lokern), Inc., Volumes I through IV.*" dated March 8, 1991, prepared by Environmental Technology Engineering, Inc.
2. Except as otherwise required elsewhere in this Permit, the Permittee shall close hazardous waste landfills WMU 28, 33, 34, and 35 in accordance with Chapter 8 of the Approved RCRA Part B Permit Application.
3. The Department approves the landfill closure plans specified in Chapter 8 of the Approved RCRA Part B Permit Application, contingent upon similar approval by the Regional Board. Pursuant to Section 13227 of the Water Code, this Permit shall not limit the ability of the Regional Board to place more stringent conditions in or otherwise modify site closure plans.  
[H&S Code 25247(b)(1)]
4. The Permittee shall notify the Department in writing 60 days prior to the expected date on which partial or final closure of any landfill will commence. The expected date is the date when the portion of the landfill being closed receives the final volume of hazardous waste. [22 CCR 66264.112(d)(1)]
5. The Permittee shall complete partial or final closure construction activities for any landfill unit within 180 days of receiving the final volume of hazardous or nonhazardous waste. The Department may approve without a permit modification an extension to the closure period for any landfill, if requested in writing by the Permittee, due to size, complexity of the construction of the final cover system or unforeseen delays (i.e., inclement weather).  
[22 CCR 66264.113(b)]



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6. Within 60 days of completion of partial or final landfill closure construction activities, the Permittee shall submit to the Department by registered mail a closure certification report demonstrating that the landfill was closed in accordance with closure specifications approved by the Department. The closure certification report shall be signed by the Permittee and an independent qualified professional engineer registered in California. [22 CCR 66264.115]
7. No later than 60 days after the certification of closure by the Permittee, the Permittee shall submit to the Department a survey plat which indicates the location and dimensions of the landfill with respect to permanently surveyed vertical and horizontal benchmarks. The Permittee shall also submit a copy of this plat to the local land use authority. The survey plat shall contain a prominently displayed note which states the Permittee's obligation to restrict disturbance of the hazardous waste in accordance with the applicable regulations. This condition does not apply to hazardous waste management units which are clean closed. [22 CCR 66264.116]

D. Post-Closure

1. The Permittee shall maintain all units that are closed as partial closures, prior to ultimate Facility closure, in accordance with the post-closure monitoring plan contained in Chapter 8 of the Approved RCRA Part B Permit Application. The 30 year post-closure care period specified in 22 CCR 66264.117(b) will not begin until ultimate Facility closure. [22 CCR 66271.5(c)(4) and 66264.117(b)]
2. The Permittee shall request clarification from the Department concerning the use of the previously approved geotextile drainage layer for all WMUs at the Facility 120 days prior to the start of closure of any WMU or cell. The Department will review any additional technical data submitted by the Permittee, and will consult with the CVRWQCB prior to issuing a clarification letter to the Permittee concerning the drainage material to be used.

Part V. Environmental Monitoring

The Permittee submitted an environmental monitoring program which is contained in Chapter 11.0 of the Approved RCRA Part B Permit Application. This program is hereby approved by the Department.

A. CVRWQCB Monitoring and Reporting Program

1. The Permittee shall comply with the groundwater monitoring requirements specified in Monitoring and Reporting Program No. 89-150, dated August 11, 1989, and any groundwater monitoring provision in subsequent Waste Discharge Requirements issued to the Permittee by the CVRWQCB.

Every effort has been made by the Department to ensure that conflicts do not exist between the groundwater monitoring requirements of this Permit and those required by the CVRWQCB. However, should a conflict between the groundwater monitoring requirements in this Permit and those of the CVRWQCB be discovered, the Permittee may request a minor modification (clarification) of the groundwater monitoring requirements from the Department to resolve the conflict. Prior to any clarification by the Department of any condition the Permittee believes causes conflicting groundwater monitoring requirements, the Permittee shall follow the most stringent requirement of either the Department or the CVRWQCB.  
[22 CCR Article 6 of Chapter 14]

B. Unsaturated (Vadose) Zone Monitoring

1. The Permittee shall use a neutron probe system to monitor the unsaturated zone for each regulated unit except WMU 28, rather than liquid recovery types of monitoring, pursuant to CCR 66264.97(d)(4). The Permittee has demonstrated to the satisfaction of the Department that soil-pore liquid samples cannot be obtained from soils at the Facility under normal conditions. The Permittee has also demonstrated that measurement of moisture changes in the unsaturated zone with a neutron probe system provides the best assurance of early detection of a release from a regulated unit. WMU 33 and WMU 34 have been constructed with neutron probe moisture detection systems.  
[22 CCR 66264.97(d)(4)]



2. The Permittee shall install a neutron probe soil moisture detection system beneath each cell of WMU 35, as specified in the approved construction plans and specifications for WMU 35. [22 CCR 66264.97(d)(4) and (5)]
3. Within 90 days of exceeding the Action Leakage Rate for the WMU 28 leak detection and removal system, the Permittee shall install and maintain a neutron probe moisture detection system in the unsaturated zone around the perimeter of WMU 28, in accordance with Section 11.2.4 of the Approved RCRA Part B Permit Application. Within 90 days of completion of the construction of the WMU 28 neutron probe monitoring system, the Permittee shall submit to the Department a construction certification report which contains construction logs, as-built drawings of the system and surveying information. [22 CCR 66264.97(d)(4) and (5)]
4. The Permittee submitted a document entitled "*Revised Monitoring System Plan, Laidlaw Environmental Services (Lokern), Inc.*", prepared by ENVIRON Corporation (RMSP), dated December 27, 1991. The last revision (No. 3) of the RMSP was submitted on May 26, 1995. The RMSP was incorporated by reference into the Approved RCRA Part B Permit Application. Unless specifically stated elsewhere in this Permit, the Permittee shall monitor the unsaturated zone underlying the regulated units in accordance with the RMSP, which is approved by the Department.
5. For landfills constructed after the effective date of this Permit, the Permittee shall monitor the unsaturated zone of the regulated unit with a neutron probe system on a monthly basis, in order to establish baseline conditions, for a period of one year commencing from the start of the operation of the regulated unit. After the completion of this monthly monitoring program for the unsaturated zone for one year, the Permittee shall monitor the unsaturated zone of the regulated unit during the months of February, May, August and November of each year. [22 CCR 66264.97(e)(12)(B)]
6. The Permittee shall monitor the unsaturated zone of WMU 33 with a neutron probe system during the months of February, May, August, and November of each year. [22 CCR 66264.97(e)(12)(B)]
7. The Permittee shall monitor the unsaturated zone of WMU 34 monthly until one year of monitoring data has been collected to establish baseline

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(background) moisture conditions. After the completion of one year of monthly data, the Permittee shall monitor WMU 34 during the months of February, May, August, and November of each year.  
[22 CCR 66264.97(e)(12)(B)]

8. The Permittee shall submit to the Department a vadose zone monitoring report by March 30 of each year which contains a summary of the monitoring data for WMUs 33, 34 and 35 as regulated units are constructed.
9. The Permittee shall evaluate the moisture content data measured with the neutron probe system to determine whether there is evidence of a release from a regulated unit. The Permittee shall determine if there is evidence of a release from a regulated unit based on all of the following characteristics:
  - a. Elevated liquid levels in the secondary Leachate Detection Collection and Removal System (LDCRS) of the regulated unit.
  - b. Chemical analysis of liquid samples collected from the LDCRS of the regulated unit indicate the presence of leachate in the secondary LDCRS.
  - c. Average moisture content data collected at the regulated unit using the neutron probe indicate that the leak is localized to one access tube and extends over a relatively narrow portion of the access tube.
  - d. Average moisture content data collected at the regulated unit using the neutron probe increases five to seven percent above the baseline average moisture content for the regulated unit. The baseline average moisture content is defined as the moisture content remaining in the unsaturated zone underlying the regulated unit after dissipation of the transient moisture which is released from the clay liner system by consolidation processes during the first year of operation of the regulated unit. This process is described in Section 4.2.2 of the RMSP.
10. The Permittee shall initiate the following verification and response procedure if any of the characteristics described in condition V.B.9. occur:



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- a. The Permittee shall notify the Department of its findings by certified mail within seven days of a determination that there is non-verified evidence that a non-naturally occurring increase in moisture content may have occurred.
  - b. Within 30 days of the determination that the conditions of V.B.9. have been met, the neutron access tube in which the non-natural increase in moisture content was measured will be retested.
  - c. During the retest described in condition V.B.10.b., measurements will be taken in the area of the moisture increase at half-foot increments. If the results from these measurements and the original measurements continue to indicate a non-naturally occurring moisture content increase has occurred according to condition V.B.9., an additional assessment as described in condition V.B.10.d. shall be made.
  - d. A work plan for an additional assessment, if deemed necessary by the Department, will be submitted for approval to the Department within 30 days of the determination that the non-naturally occurring moisture content increase was verified. The work plan shall be implemented following approval of the Department. A final report regarding the additional assessment shall be submitted to the Department 45 days after receiving the results of the additional assessment.  
[22 CCR 66264.97(e)(8)(E)]
11. If the results of the additional assessment described in condition V.B.10.d. indicate an evidence of a release from a regulated unit, the Permittee must, within 45 days, submit a permit modification application to the Department to establish an evaluation monitoring program. [22 CCR 66264.98(k)(5)]
12. Within 135 days after determining there is significant evidence of a release from a regulated unit based on the results of the neutron access tube system, the Permittee shall submit to the Department an engineering feasibility study for a corrective action program necessary to meet the requirements of 22 CCR 66264.100. At a minimum the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations of concern. [22 CCR 66264.98(k)(6)]
13. If the Permittee determines that there is significant evidence of a release from a regulated unit based on the results of the neutron access tube system, the Permittee may demonstrate that a source other than the regulated unit caused



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the evidence of a release or that the evidence is an artifact caused by an error in sampling, analysis or data evaluation, or by natural variation in the unsaturated zone. The Permittee may make a demonstration pursuant to this condition in addition to, or in lieu of, submitting both a permit modification and an engineering feasibility study. However, the Permittee is not relieved of the requirements specified in condition V.B.11. and condition V.B.12. unless the demonstration made under this condition successfully shows that a source other than a regulated unit caused the evidence of a release or that the evidence resulted from error in sampling, analysis, data evaluation or natural variation in the unsaturated zone. In making a demonstration, the Permittee shall follow conditions V.C.5.1.(1) through V.C.5.1.(4) of this Permit.

C. Groundwater Detection Monitoring Program

The Permittee submitted a document entitled "*Revised Monitoring System Plan, Laidlaw Environmental Services (Lokern), Inc.*", prepared by ENVIRON Corporation, dated December 27, 1991. The Revised Monitoring System Plan (RMSP) was incorporated by reference into the Approved RCRA Part B Permit Application. The last revision (No. 3) of the RMSP was submitted to the Department on May 26, 1995. Unless specifically stated elsewhere in this Permit, the Permittee shall monitor the groundwater beneath the Facility in accordance with the RMSP, which is approved by the Department.

1. Monitoring Points and Point of Compliance

- a. Unless otherwise specifically stated elsewhere in this Permit, the Permittee shall construct, if necessary, and maintain all of the existing groundwater piezometers and background and point of compliance (POC) monitoring wells originally installed in the Upper Perched Zone, Intermediate Perched Zone and Lower Water Table Zone as indicated on Table V-1 of this Permit. [22 CCR 66264.95(a)]
- b. Within 90 days of the effective date of this Permit, the Permittee shall begin construction of the proposed groundwater monitoring wells listed in Table V-1., with the exception of wells for WMU 35. [22 CCR 66264.95(a)]
- c. Proposed groundwater monitoring wells used to monitor WMU 35 shall be installed as the various phases of WMU 35 are constructed. Proposed groundwater monitoring wells shall be installed prior to start of construction of the regulated unit to be monitored. Existing



groundwater monitoring wells and/or piezometers located within the footprint of WMU 35 shall not be abandoned until one quarter of groundwater monitoring data has been collected from both the existing and new wells during the same quarter. [22 CCR 66264.95(a)]

- d. If the Permittee determines that any background or POC monitoring well specified in Table V-1 is incapable of yielding representative samples, due to declining water levels or due to the monitoring well affecting the groundwater chemistry, such that representative groundwater samples cannot be collected, the Permittee shall notify the Department in writing no later than thirty days after making the determination. The Permittee shall replace any such well within ninety (90) calendar days after the submittal of the notification to the Department. If the Department determines that any monitoring well is incapable of yielding representative groundwater samples, the Department will notify the Permittee and require that the monitoring well be replaced within 90 days after the Permittee receives the Department's notification.

## 2. Monitoring Well Construction Standards

- a. All groundwater monitoring wells installed after the effective date of this Permit shall be constructed in a manner that maintains the integrity of the drill hole and prevents the bore-hole from acting as a conduit for contaminant transport. [22 CCR 264.97(b)(4)]
- b. All monitoring wells shall be logged during drilling under the direct supervision of a registered geologist. [22 CCR 66264.97(e)(2)]
- c. Soil in the geologic log shall be classified according to the Unified Soil Classification System. [22 CCR 66264.97(e)(2)(A)].
- d. Logs of monitoring wells shall be filed with the California Department of Water Resources (DWR). [22 CCR 66264.97(b)(3)]
- e. For each monitoring well the annular space above the sampling interval (screen area) shall be appropriately sealed to prevent contamination from the surface, entry of contamination from the unsaturated zone, cross contamination of saturated zones and contamination of the samples. [22 CCR 66264.97(b)(6)]

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- f. All wells shall be adequately developed to enable collection of representative groundwater samples. [22 CCR 66264.97(b)(7)]
- g. The Permittee shall submit a monitoring well construction certification report to the Department within ninety (90) days after the completion of a single well. If multiple wells are constructed during a single construction program, the report shall be submitted within ninety (90) calendars after the completion of the last new monitoring well. The construction certification report shall include geologic logs, geophysical logs, monitoring well as-built drawings and well development records. [22 CCR 66264.97(e)(2)]
- h. The Permittee shall abandon the monitoring wells and/or piezometers listed in Table V-1 according to the well abandonment specifications described in Appendix F of the RMSP. If the abandonment of a monitoring well, piezometer, or interface well which is not listed on Table V-1 is proposed, the Permittee shall submit a well abandonment plan to the Department for review and approval. The plan must identify the well or piezometer to be abandoned and the reason for abandonment, describe the well abandonment method, and contain schedules for well abandonment. Upon completion of the abandonment, the Permittee shall submit a well abandonment certification report to the Department no later than 90 days from completion. If multiple wells are abandoned in a single field program, the Permittee shall submit a well abandonment certification report to the Department no later than 90 days from the completion of the last well abandonment in the program.

3. Sample Collection and Analysis

- a. The Permittee shall collect and analyze groundwater samples from the background and point of compliance monitoring wells listed in Table V-1 of this Permit on a quarterly frequency during the active life of the Facility. The quarterly sampling of wells shall commence during the months of February, May, August, and November of each year. [22 CCR 66264.97(e)(12)(B)]
- b. The Permittee shall use the techniques and procedures contained in Appendix B of the RMSP (Groundwater Sampling and Analysis Plan) when collecting and analyzing samples from the background and point of compliance groundwater monitoring wells listed in Table V-1. The



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Permittee shall also follow the quality assurance/quality control procedures contained in Appendix C of the RMSP (Quality Assurance Project Plan) when collecting and analyzing samples from the background and point of compliance groundwater monitoring wells listed in Table V-1.

[H&S Code 25159.5(b), 22 CCR 264.98 (e) and (f)]

- c. The Permittee shall collect and analyze groundwater samples for the monitoring parameters and the general chemistry parameters specified in Table V-2 and Table V-3 of this Permit on a quarterly basis during the active life of the Facility. [22 CCR 66264.98(e)]
- d. Table V-4 of this Permit lists the Constituents of Concern (COCs) and their respective water quality protection standards. The Permittee shall collect and analyze groundwater samples for the COCs listed in Table V-4 within one year from the effective date of this Permit and every five years thereafter during the active life of the Facility. [22 CCR 66264.92(a), 66264.93, and 66264.98(g)]
- e. The Permittee is allowed to investigate the use of Stable Isotope data of the groundwater to augment the detection monitoring system. The use of Stable Isotope analyses for detection monitoring is not intended to fully preclude chemical analysis of groundwater, but rather to enhance the existing detection monitoring program. If the use of Stable Isotope analyses is accepted by the Permittee, it should be phased into the chemical monitoring cycles (e.g., quarters). During the period that it is phased into the monitoring schedule, data from chemical and Stable Isotope analyses would be evaluated by both the Permittee and the Department. If evidence is derived to support using Stable Isotope analyses, it may supersede some or all of the routine groundwater monitoring for chemical analyses in the future. In addition, the Permittee is encouraged to use data from Stable Isotope analyses of groundwater for characterizing suspected or known releases from WMUs. If Stable Isotope procedures are implemented by the Permittee, the Permittee shall receive approval from the Department in the form of a letter of approval or denial of the consultant selected to analyze and interpret the resulting data.

4. Statistical Analyses

- a. The Permittee shall use the prediction limit statistical method specified in Section 3.6 of the RMSP to determine background water quality concentration limits for the inorganic monitoring parameters listed in Table V-2. Table V-2 also includes the concentration limits of the inorganic monitoring parameters calculated based on data collected from 1991 through 1994. Background water quality concentration limits for the inorganic monitoring parameters shall be updated (re-calculated) annually at a minimum. The Permittee shall calculate new background water quality limits more frequently if there is a need to more accurately reflect changes in background water quality. The Department will review the revised limits and approve them by a letter of acceptance. [22 CCR 66264.97(e)(8) and 22 CCR 66264.97(e)(11)]
- b. The Permittee shall use the Estimated Quantification Limit (EQL), which is the updated terminology for the Practical Quantification Limit (PQL), as listed in Manual SW-846, U.S. EPA, September 1994, or the most recent update, and as specified in Section 3.6 of the RMSP, to determine background water quality concentrations limits for the organic monitoring parameters listed in Table V-2. Background water quality concentration limits for the organic monitoring parameters shall be updated annually at a minimum. The Permittee shall calculate new background water quality limits more frequently if there is a need to more accurately reflect changes in the background water quality. The Department will review the revised limits and approve by a letter of acceptance. [22 CCR 66264.97(e)(8) and 22 CCR 66264.97(e)(11)]
- c. The Permittee shall use the prediction limit statistical method specified in Section 3.6 of the RMSP to determine background water quality concentration limits for the inorganic constituents of concern listed in Table V-4, with the exception of barium, manganese, molybdenum and silicon. Demonstration reports submitted prior to the effective date of this Permit have proven that these four inorganic constituents vary spatially in concentration in groundwater underlying the regulated units. The Permittee shall use Shewart-CUSUM control charts to evaluate barium, manganese, molybdenum and silicon when monitoring for the constituents of concern. The background water quality concentration limits and control charts for the inorganic constituents of concern shall be updated at a minimum every five years from the effective date of this Permit. [22 CCR 66264.97(e)(8) and 22 CCR 66264.97(e)(11)]



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- d. The Permittee shall use the Estimated Quantification Limit (EQL), which is the updated terminology for the Practical Quantification Limit (PQL) as listed in Manual SW-846, U.S. EPA, September 1994, or the most recent update, and as specified in Section 3.6 of the RMSP, to determine background water quality concentrations limits for the organic constituents of concern listed in Table V-4. Background water quality concentration limits for the organic constituent of concern shall be updated annually at a minimum. The Permittee shall calculate new background water quality limits more frequently if there is a need to more accurately reflect changes in the background water quality. The Department will review the updated limits and approve by a letter of acceptance. [22 CCR 66264.97(e)(8) and 22 CCR 66264.97(e)(11)]
- e. Prior to applying new background data to update concentration limits, the Permittee shall screen the new background data and any obvious data that are outside the reasonable range of background using the method described in Section 3.6 of the RMSP. If outlying data is identified, these data shall be excluded from the measurements used to compute the background concentration limit. The annual water quality monitoring report or the first quarterly report of the following calendar year will identify the censored data and provide the rationale for any action taken to censor monitoring data from the historical record.
- f. The Permittee shall evaluate the POC groundwater quality data collected from the quarterly sampling events to determine whether there is statistical evidence of a release. The Permittee shall compare the POC inorganic groundwater quality data to the background inorganic water quality concentration limits calculated by Permit condition V.C.4.a. and V.C.4.c. The Permittee shall compare the POC organic groundwater quality data to the concentration limits determined by Permit conditions V.C.5.b. and V.C.5.d. [22 CCR 66264.98(i)]
- g. The Permittee shall qualitatively evaluate the general chemistry parameters listed in Table V-3 for trends which maybe an indication of a release.

5. Reporting, Record-keeping, and Response

- a. Water quality monitoring data collected in accordance with Section V.C. of this Permit, including actual values of constituents and parameters, shall be maintained in the Facility operating record. [22 CCR 66264.97(e)(16)]
- b. The Permittee shall submit to the Department a quarterly groundwater monitoring report which contains the data and analysis obtained pursuant to conditions V.C.4. and V.C.5. no later than 90 days after each sampling event. At a minimum the quarterly report shall include a discussion regarding the sampling event, evaluation of the analytical data, groundwater contour maps, groundwater flow rate and direction and groundwater quality analytical data presented in tabular format along with copies of the analytical data. [H&S Code 25159.5(b) and 22 CCR 66264.97(e)(15) and (16)]
- c. The Permittee shall submit to the Department an annual groundwater monitoring report by March 30 of each year which contains graphs of all analytical data from each point of compliance and background monitoring well. Graphs for a given constituent shall be at a scale appropriate to show trends or variations in groundwater quality. All graphs for a given constituent shall be plotted at the same scale to facilitate visual comparison of monitoring data. [22 CCR 66264.97(e)(14)]
- d. If the Permittee determines that there is statistical evidence of a release for any monitoring parameter or constituent of concern (POC water quality concentration of a monitoring parameter or constituent of concern is greater than the background water quality concentration limit) at any point of compliance monitoring well, the Permittee shall notify the Department of the findings by certified mail within seven days of such determination. [22 CCR 264.98(j)(1)]
- e. The Permittee shall verify the exceedence with two discrete retests within 45 days of determining that there is statistical evidence of a release by collecting groundwater samples pursuant to Permit condition V.C.4.b. The groundwater sample(s) shall be analyzed for the monitoring parameter or constituent of concern which exceeded the background concentration limit. An exceedence is verified when any one of the two discrete retests contains a concentration of the



monitoring parameter or constituent of concern which exceeds the concentration limit. If the monitoring parameter or constituent of concern is not verified, the point of compliance monitoring well shall be returned to routine detection monitoring.  
[22 CCR 66264.98(j)(2) and 22 CCR 66264.97(e)(8)(E)(8)]

- f. The Permittee shall notify the Department of the results of the two discrete retests for verification purposes within seven days of receiving the last laboratory analysis of the verification samples.  
[22 CCR 66264.97.(e)(7)]
- g. If verification resampling conducted pursuant to Permit condition V.C.5.e. confirms that there is statistical evidence of a release, the Permittee shall collect groundwater samples during next quarter from the following monitoring wells:
  - (1) The point of compliance well which exceeded the concentration limit;
  - (2) Two contiguous point of compliance monitoring wells within the same water bearing zone, immediately cross-hydraulic gradient on either side of the original monitoring well; and
  - (3) Background monitoring well within the same water bearing zone as the point of compliance monitoring well which exceeded that concentration limit.

The Permittee shall analyze the groundwater samples for the constituents of concern listed in Table V-4 and Appendix IX constituents. [22 CCR 66264.98(k)(1) and (2)]

- h. The Permittee may, within one month of receiving the laboratory report as specified in Permit condition V.C.5.g., resample and repeat the analysis for those constituents that were detected by the Appendix IX analysis which are not on the list of constituents of concern for that unit. The constituent(s) detected in both analysis shall be added to the list of constituents of concern listed in Table V-4 for evaluation monitoring unless the Permittee demonstrates to the satisfaction of the Department that the constituent is not reasonably expected to be in or derived from the waste in the regulated unit. [22 CCR 66264.98(k)(3)]

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- i. For each Appendix IX constituent added to the list of constituents of concern, the Permittee shall:
  - (1) Collect all data necessary for establishing the background concentration for that constituent and for selecting an appropriate statistical procedure pursuant to 22 CCR 66264.97(e)(6);
  - (2) Propose an appropriate statistical procedure pursuant to 22 CCR 66264.97(e)(7);
  - (3) Propose a procedure to establish the background concentration for that constituent pursuant to 22 CCR 66264.97(e)(10); and
  - (4) Establish the background concentration pursuant to 22 CCR 66264.97(e)(11). [22 CCR 66264.98(k)(4)]
- j. Within 90 days of determining statistically significant evidence of a release, the Permittee shall submit to the Department an application for a permit modification to establish an evaluation monitoring program. The application shall include the following: [22 CCR 66264.98(k)(5)]
  - (1) Identification of the concentration of each constituent of concern and Appendix IX parameter at each monitoring point as determined by the most recent sampling event;
  - (2) Any proposed changes to the water quality monitoring systems at the Facility necessary to meet the requirements of 22 CCR 66264.99;
  - (3) Any proposed changes to the monitoring frequency, sampling and analytical procedures or methods or statistical methods used at the Facility necessary to meet the requirements of 22 CCR 66264.99; and
  - (4) A detailed description of the measures to be taken by the Permittee to assess the nature and extent of the release from the regulated unit.



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- k. Within 180 days of determining statistically significant evidence of a release, the Permittee shall submit to the Department an engineering feasibility study for a corrective action program necessary to meet the requirements of 22 CCR 66264.100. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern. [22 CCR 66264.98(k)(6)]
- l. If the Permittee determines that there is a statistically significant evidence of a release from the regulated unit at any monitoring point, the Permittee may demonstrate that a source other than the regulated unit caused the evidence of a release or that the evidence is an artifact caused by an error in sampling, analysis or statistical evaluation, or by natural variation in the groundwater. The Permittee may make a demonstration pursuant to this section in addition to, or in lieu of, submitting both a permit modification application and an engineering feasibility study. However, the Permittee is not relieved of the requirements specified in conditions V.C.5.j and V.C.5.k unless the demonstration made under this section successfully show that a source other than the regulated unit caused the evidence of a release or that the evidence resulted from error in sampling, analysis or evaluation or natural variation in groundwater. In making a demonstration, the Permittee shall:
  - (1) Within seven days of verifying statistically significant evidence of a release, notify the Department by certified mail that the Permittee intends to make a demonstration pursuant to this section;
  - (2) Within 90 days of verifying statistically significant evidence of a release, submit a report to the Department that demonstrates that a source other than the regulated unit caused the evidence, or that the evidence resulted from error in sampling, analysis or evaluation or from natural variation in groundwater;
  - (3) Within 90 days of verifying statistically significant evidence of a release, submit to the Department an application for a permit modification to make any appropriate changes to the detection monitoring program; and

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- (4) Continue to monitor in accordance with the detection monitoring program established in this Permit. [22 CCR 66264.98(k)(7)]
- m. If the Permittee determines that there is significant physical evidence of a release as described in 22 CCR 264.91(a)(3) or that the detection monitoring program does not satisfy the requirements of 22 CCR 66264.98, the Permittee shall notify the Department by certified mail within seven days of such determination and within 90 days submit an application for a permit modification to make any appropriate changes to the program. [22 CCR 66264.98(l)]
- n. Any time the Department determines that the detection monitoring program does not satisfy the requirements of this section, the Department will send written notification of such determination to the Permittee by certified mail, return receipt requested. The Permittee shall within 90 days after receipt of such notification by the Department, submit an application for a permit modification to make any appropriate changes to the program. [22 CCR 66264.98(m)]
- o. Upon the effective date of this Permit, the Permittee shall add potassium to the quarterly groundwater monitoring program. After the collection of three (3) years of quarterly analytical data, the Department will determine if potassium should be permanently added to the quarterly monitoring program.

D. Air Detection Monitoring

The Permittee submitted an Ambient Air Monitoring Plan for GSX Services (Petroleum Waste), Inc., Phase 1- Collection of Source and Meteorological Data; Revised August 31, 1990, which is contained in Appendix 11.1-1 of the Approved RCRA Part B Permit Application. Unless specifically stated elsewhere in this Permit, the Permittee shall monitor the Ambient Air at the Facility in accordance with the Ambient Air Monitoring Plan which is approved by the Department. Additionally, the Permittee shall comply with all applicable requirements of Article 17 of Division 4.5 of 22 CCR for Ambient Air Monitoring, and the following:

- 1. No later than 365 days from the effective date of this Permit, the Permittee shall submit a workplan describing its monitoring and response program in accordance with the requirements of 22 CCR 66264.701.



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2. The Monitoring and Response Program shall be consistent with the document entitled "Risk Assessment for the Laidlaw Environmental Services (Lokern), Inc., RCRA Part B Modification Application and Kern County CUP Modification Application", prepared by Environ Corporation, dated October 22, 1993 and subsequent revisions dated September 13, 1994 and February 14, 1995 and supporting document entitled "Estimation of Emissions and Ambient Air Concentration for the Laidlaw Environmental Services (Lokern), Inc., RCRA Part B Application and CUP Modification Application", prepared by Precise Environmental Consultants, dated September 1993.
  3. No later than 365 days from the effective date of this Permit, the Permittee shall establish and submit to the Department the concentration limit for a hazardous constituent in the open air immediately down wind from the regulated WMUs in accordance with 22 CCR 66264.704(c).
  4. Until the Department approves this monitoring and response program, the Permittee shall make available to the Department, upon request, all air monitoring data required by the San Joaquin Valley Unified Air Pollution Control District.
- E. Compliance With Air Emission Standards for Process Vents
- The Permittee shall comply with the requirements of 22 CCR 66264.1032 through 22 CCR 66264.1036, as applicable. [22 CCR 66264.1030]
- F. Compliance With Air Emission Standards for Equipment Leaks
- The Permittee shall comply with the requirements of 22 CCR 66264.1052 through 22 CCR 66264.1065 as applicable. [22 CCR 66264.1050]
- G. Compliance With Air Emission Standards for Tank Systems
- The Permittee shall comply with the requirements of 40 CFR, Sections 264.1082 through 40 CFR 264.1091 as applicable. [H&S Code 25159.6]

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Table V-1  
GROUNDWATER MONITORING WELL NETWORK

UPPER PERCHED ZONE

<u>Background Monitoring Wells</u>	<u>POC Monitoring Wells</u>	<u>WMU Monitored</u>	<u>Piezometers</u>	<u>Interface Wells</u>
MW-130U <sup>(1)</sup>	MW-144U <sup>(1,2)</sup>	WMU 18 & 35	P-4RU <sup>(7)</sup>	I-1 <sup>(9)</sup>
MW-143U <sup>(1)</sup>	MW-158U <sup>(3)</sup>	WMU 35	P-120U <sup>(5)</sup>	I-2 <sup>(9)</sup>
MW-QU <sup>(1)</sup>	MW-160U <sup>(4)</sup>	WMU 33	P-127U <sup>(5)</sup>	I-3 <sup>(9)</sup>
MW-TU <sup>(1)</sup>	MW-161U <sup>(4)</sup>	WMU 33	P-138U <sup>(7)</sup>	P-103I-1 <sup>(8)</sup>
			P-139U <sup>(5)</sup>	
			P-140U <sup>(7)</sup>	
			P-141U <sup>(5)</sup>	
			P-142U <sup>(5)</sup>	

INTERMEDIATE PERCHED ZONE

<u>Background Monitoring Wells</u>	<u>POC Monitoring Wells</u>	<u>WMU Monitored</u>	<u>Piezometers</u>
MW-148I <sup>(1)</sup>	MW-137RI <sup>(1)</sup>	WMU 35	P-125I <sup>(5)</sup>
MW-149RI <sup>(1)</sup>			P-128I <sup>(5)</sup>
			P-RI <sup>(5)</sup>



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Table V-1 (Continued)  
GROUND WATER MONITORING WELL NETWORK

LOWER WATER TABLE ZONE

<u>Background Monitoring Wells</u>	<u>POC Monitoring Wells</u>	<u>WMU Monitored</u>	<u>Piezometers</u>
MW-102RL <sup>(1)</sup>	MW-151L <sup>(1)</sup>	WMU 35	P-102L <sup>(6)</sup>
MW-119RL <sup>(1)</sup>	MW-152RL <sup>(1)</sup>	WMU 35	P-118L <sup>(6)</sup>
MW-PL <sup>(1)</sup>	MW-153L <sup>(1)</sup>	WMU 35	P-119L <sup>(6)</sup>
	MW-163L <sup>(3)</sup>	WMU 35	P-121L <sup>(6)</sup>
	MW-164L <sup>(1)</sup>	WMU 35	P-126L <sup>(6)</sup>
	MW-165L <sup>(4)</sup>	WMU 33	P-126RL <sup>(7)</sup>
	MW-166L <sup>(4)</sup>	WMU 33	P-150RL <sup>(7)</sup>
	MW-167L <sup>(4)</sup>	WMU 28	P-152L <sup>(6)</sup>
	MW-168L <sup>(4)</sup>	WMU 33	P-154L <sup>(6)</sup>
	MW-169L <sup>(4)</sup>	WMU 34	P-156L <sup>(6)</sup>

Notes:

- (1) Existing monitoring well incorporated from previously permitted monitoring well network.
- (2) MW-144U is currently dry, as a substitute the Permittee shall use MW-145U.
- (3) Proposed monitoring well which will be installed prior to construction of associated phases of WMU 35. MW-158U and MW-163L must be installed prior to the abandonment of MW-122U and MW-105L, respectively.
- (4) Proposed monitoring well to be installed after the effective date of the Permit in order to meet requirements of 22 CCR 66264.95(a).
- (5) Existing piezometer incorporated from previous monitoring well network.
- (6) Dry monitoring well replaced by new well under previously permitted monitoring well network; converted to a piezometer after the effective date of this Permit.
- (7) Formerly a monitoring well under the previously permitted monitoring well network; converted to a piezometer after the clean closure of WMU's 19, 20, 24, and 25.
- (8) Existing interface well incorporated from previous monitoring well network.
- (9) Proposed interface well to be installed prior to construction of associated phases of WMU 35.

Table V-2  
GROUNDWATER DETECTION MONITORING PARAMETERS

Detection Monitoring Parameters		Test Method**	Concentration Limit - Upper Perched Zone*	Concentration Limit - Intermediate Perched Zone*	Concentration Limit - Lower Water Table Zone*
<u>Inorganic Parameters</u>					
1	Arsenic	6020	0.0254 mg/L	0.2748 mg/L	0.0058 mg/L
2	Beryllium	6010	0.0020 mg/L	0.0020 mg/L	0.0020 mg/L
3	Boron	6010	10.6713 mg/L	7.6574 mg/L	10.9756 mg/L
4	Calcium	6010	807.3287 mg/L	428.9692 mg/L	309.6245 mg/L
5	Chloride	300	TBD	TBD	TBD
6	Cobalt	6010	0.0100 mg/L	0.0100 mg/L	0.0100 mg/L
7	Copper	6010	0.0200 mg/L	0.0200 mg/L	0.0200 mg/L
8	Magnesium	6010	273.9460 mg/L	123.5918 mg/L	175.7713 mg/L
9	Selenium	6020	0.0990 mg/L	0.0162 mg/L	0.0200 mg/L
10	Silver	6010	0.0100 mg/L	0.0100 mg/L	0.0100 mg/L
11	Sodium	6010	924.9498 mg/L	476.3009 mg/L	541.7552 mg/L
12	Sulfate	300	TBD	TBD	TBD
13	Thallium	6010	2.0000 mg/L	2.0000 mg/L	2.0000 mg/L
14	Vanadium	6010	0.0610 mg/L	0.0160 mg/L	0.0608 mg/L
15	Zinc	6010	0.0460 mg/L	0.0820 mg/L	0.0740 mg/L



Table V-2  
GROUNDWATER DETECTION MONITORING PARAMETERS

Detection Monitoring Parameters		Test Method**	Concentration Limit - Upper Perched Zone*	Concentration Limit - Intermediate Perched Zone*	Concentration Limit - Lower Water Table Zone*
<u>Organic Parameters:</u>					
16	Benzene	8240	5 ug/L	5 ug/L	5 ug/L
17	Bromodichloromethane	8240	5 ug/L	5 ug/L	5 ug/L
18	Bromoform	8240	5 ug/L	5 ug/L	5 ug/L
19	Bromomethane	8240	10 ug/L	10 ug/L	10 ug/L
20	Carbon disulfide	8240	100 ug/L	100 ug/L	100 ug/L
21	Carbon tetrachloride	8240	5 ug/L	5 ug/L	5 ug/L
22	Chlorobenzene	8240	5 ug/L	5 ug/L	5 ug/L
23	Chloroethane	8240	10 ug/L	10 ug/L	10 ug/L
24	Chloroform	8240	5 ug/L	5 ug/L	5 ug/L
25	Chloromethane	8240	10 ug/L	10 ug/L	10 ug/L
26	Dibromochloromethane	8240	5 ug/L	5 ug/L	5 ug/L
27	1,1-Dichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
28	trans 1,2-Dichloroethene	8240	5 ug/L	5 ug/L	5 ug/L
29	1,2-Dichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
30	1,1-Dichloroethene	8240	5 ug/L	5 ug/L	5 ug/L
31	1,2 Dichloropropane	8240	5 ug/L	5 ug/L	5 ug/L

Table V-2  
GROUNDWATER DETECTION MONITORING PARAMETERS

Detection Monitoring Parameters		Test Method**	Concentration Limit - Upper 'Perched Zone'	Concentration Limit - Intermediate Perched Zone*	Concentration Limit - Lower Water Table Zone*
32	cis-1,3-Dichloropropene	8240	5 ug/L	5 ug/L	5 ug/L
33	trans-1,3-Dichloropropene	8240	5 ug/L	5 ug/L	5 ug/L
34	Ethylbenzene	8240	5 ug/L	5 ug/L	5 ug/L
35	Styrene	8240	5 ug/L	5 ug/L	5 ug/L
36	Tetrachloroethene	8240	5 ug/L	5 ug/L	5 ug/L
37	1,1,2-2-Tetrachloroethane	8240	5 ug/L	5 ug/L	5 ug/L
38	Toluene	8240	5 ug/L	5 ug/L	5 ug/L
39	1,1,1-Trichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
40	1,1,2-Trichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
41	Trichloroethene	8240	5 ug/L	5 ug/L	5 ug/L
42	Vinyl chloride	8240	10 ug/L	10 ug/L	10 ug/L
43	Xylenes (total)	8240	5 ug/L	5 ug/L	5 ug/L

Notes: \* Inorganic Detection Monitoring Parameters Concentration Limits will be updated annually or more frequently using prediction limits.

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\*\* Permittee may use updated EPA analytical test methods when EPA publishes new approved analytical test methods.

TBD = To be determined; sufficient background data are not available to control experiment-wise error rate to approximately 5 percent and the individual monitoring point error rate to approximately one percent. Concentration limits for organic monitoring parameters are based on the Estimated Quantification Limit (EQL) as listed in Manual SW-846, U.S. EPA, September 1994 or the most recent update, and as specified in Section 3.6 of the RMSP. However, sample EQLs are highly matrix dependent. The EQLs specified in the table are laboratory specific and may not always be achievable.



Table V-3  
GROUNDWATER MONITORING GENERAL CHEMISTRY PARAMETERS

	General Chemistry Parameters	EPA Test Method Specified*
1	Ph*	9040
2	Specific Conductance*	9050
3	Total Dissolved Solids	160.1
4	Total Organic Carbon	9060
5	Temperature*	170.1
6	Turbidity*	180.1
7	Aluminum	6010
8	Antimony	6010
9	Barium**	6010
10	Cadmium	6010
11	Chromium	6010
12	Iron	6010
13	Lead	6020
14	Manganese**	6010
15	Mercury	7470
16	Molybdenum**	6010
17	Nickel	6010
18	Potassium***	6010
19	Silicon**	6010
20	Acetone*	8240
21	Methylene chloride*	8240
22	2-Butanone*	8240
23	2-Chloroethyl vinyl ether*	8240
24	2-Hexanone*	8240
25	4-Methyl-2-pentanone*	8240
26	Vinyl acetate*	8240

\* These parameters are measured in the field at the time of groundwater monitoring.

\*\* Spatial variability parameters

\*\*\* Potassium will be evaluated as a possible monitoring parameter after the collection of three years of quarterly background data.

+ Groundwater samples will be analyzed for these parameters, but not statistically analyzed.

new When EPA publishes new approved analytical test methods, the Permittee may use the analytical methods.

Table V-4  
GROUNDWATER CONSTITUENTS OF CONCERN (COCs)

Constituents of Concern		Test Method **	Concentration Limit - Upper Perched Zone	Concentration Limit - Intermediate Perched Zone	Concentration Limit - Lower Water Table Zone
<u>Inorganic Parameters</u>					
1	Aluminum	6010	0.1000 mg/L	0.1000 mg/L	0.1000 mg/L
2	Antimony	6010	0.0600 mg/L	0.0600 mg/L	0.0600 mg/L
3	Arsenic	6020	0.0254 mg/L	0.2748 mg/L	0.0058 mg/L
4	Barium	6010	0.0290 mg/L	0.0263 mg/L	0.0290 mg/L
5	Beryllium	6010	0.0020 mg/L	0.0020 mg/L	0.0020 mg/L
6	Boron	6010	10.6713 mg/L	7.6574 mg/L	10.9756 mg/L
7	Cadmium	6010	0.0083 mg/L	0.0050 mg/L	0.0065 mg/L
8	Calcium	6010	807.3287 mg/L	428.9692 mg/L	309.6245 mg/L
9	Chloride	300	TBD	TBD	TBD
10	Chromium	6010	0.0240 mg/L	0.0100 mg/L	0.0100 mg/L
11	Cobalt	6010	0.0100 mg/L	0.0100 mg/L	0.0100 mg/L
12	Copper	6010	0.0200 mg/L	0.0200 mg/L	0.0200 mg/L
13	Iron	6010	1.1000 mg/L	0.4058 mg/L	0.2000 mg/L
14	Lead	6020	0.0100 mg/L	0.0050 mg/L	0.0100 mg/L
15	Magnesium	6010	273.9460 mg/L	123.5918 mg/L	175.7713 mg/L
16	Manganese	6010	0.1800 mg/L	1.3351 mg/L	0.1600 mg/L
17	Mercury	7470	0.0004 mg/L	0.0004 mg/L	0.0004 mg/L
18	Molybdenum	6010	0.1094 mg/L	0.2749 mg/L	0.1040 mg/L
19	Nickel	6010	0.3700 mg/L	0.0400 mg/L	0.2000 mg/L
20	Potassium	6010	TBD	TBD	TBD



Table V-4  
GROUNDWATER CONSTITUENTS OF CONCERN (COCs)

Constituents of Concern		Test Method **	Concentration Limit - Upper Perched Zone	Concentration Limit - Intermediate Perched Zone	Concentration Limit - Lower Water Table Zone
21	Selenium	6020	0.0990 mg/L	0.0162 mg/L	0.0200 mg/L
22	Silicon	6010	26.9276 mg/L	24.9000 mg/L	16.4528 mg/L
23	Silver	6010	0.0100 mg/L	0.0100 mg/L	0.0100 mg/L
24	Sodium	6010	924.9498 mg/L	476.3009 mg/L	541.7552 mg/L
25	Sulfate	300	TBD	TBD	TBD
26	Thallium	6010	2.0000 mg/L	2.0000 mg/L	2.0000 mg/L
27	Vanadium	6010	0.0610 mg/L	0.0160 mg/L	0.0608 mg/L
28	Zinc	6010	0.0460 mg/L	0.0820 mg/L	0.0740 mg/L
<u>Organic Parameters:</u>					
29	Acetone	8240	100 ug/L	100 ug/L	100 ug/L
30	Acrylonitrile	8240	100 ug/L	100 ug/L	100 ug/L
31	Benzene	8240	5 ug/L	5 ug/L	5 ug/L
32	Benzyl chloride	8240	100 ug/L	100 ug/L	100 ug/L
33	Bromodichloromethane	8240	5 ug/L	5 ug/L	5 ug/L
34	Bromoform	8240	5 ug/L	5 ug/L	5 ug/L
35	Bromomethane	8240	10 ug/L	10 ug/L	10 ug/L
36	2-Butanone	8240	100 ug/L	100 ug/L	100 ug/L

Table V-4  
GROUNDWATER CONSTITUENTS OF CONCERN (COCs)

Constituents of Concern	Test Method**	Concentration Limit - Upper Perched Zone	Concentration Limit - Intermediate Perched Zone	Concentration Limit - Lower Water Table Zone
37 n-Butyl alcohol	DAI or 8240	1 mg/L	1 mg/L	1 mg/L
38 Carbon disulfide	8240	100 ug/L	100 ug/L	100 ug/L
39 Carbon tetrachloride	8240	5 ug/L	5 ug/L	5 ug/L
40 Chlorobenzene	8240	5 ug/L	5 ug/L	5 ug/L
41 Chloroethane	8240	10 ug/L	10 ug/L	10 ug/L
42 2-Chloroethyl vinyl ether	8240	10 ug/L	10 ug/L	10 ug/L
43 Chloroform	8240	5 ug/L	5 ug/L	5 ug/L
44 Chloromethane	8240	10 ug/L	10 ug/L	10 ug/L
45 o-Cresol	8270	10 ug/L	10 ug/L	10 ug/L
46 m-Cresol	8270	10 ug/L	10 ug/L	10 ug/L
47 p-Cresol	8270	10 ug/L	10 ug/L	10 ug/L
48 Cresol	8270	10 ug/L	10 ug/L	10 ug/L
49 Dibromochloromethane	8240	5 ug/L	5 ug/L	5 ug/L
50 1,4-Dichlorobenzene	8270	10 ug/L	10 ug/L	10 ug/L
51 1,1-Dichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
52 1,2-Dichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
53 1,1-Dichloroethylene	8240	5 ug/L	5 ug/L	5 ug/L
54 1,2-Dichloroethylene (trans)	8240	5 ug/L	5 ug/L	5 ug/L
55 1,2 Dichloropropane	8240	5 ug/L	5 ug/L	5 ug/L
56 cis-1,3-Dichloropropene	8240	5 ug/L	5 ug/L	5 ug/L
57 trans-1,3-Dichloropropene	8240	5 ug/L	5 ug/L	5 ug/L



Table V-4  
GROUNDWATER CONSTITUENTS OF CONCERN (COCs)

Constituents of Concern		Test Method	Concentration Limit - Upper Perched Zone	Concentration Limit - Intermediate Perched Zone	Concentration Limit - Lower Water Table Zone
58	2,4-Dinitrotoluene	8270	10 ug/L	10 ug/L	10 ug/L
59	2-Ethoxyethanol	DAI	10 mg/L	10 mg/L	10 mg/L
60	Ethyl acetate	8240	10 ug/L	10 ug/L	10 ug/L
61	Ethyl ether	8240	10 ug/L	10 ug/L	10 ug/L
62	Ethylbenzene	8240	5 ug/L	5 ug/L	5 ug/L
63	Ethylene dibromide	8240	5 ug/L	5 ug/L	5 ug/L
64	Hexachlorobenzene	8270	10 ug/L	10 ug/L	10 ug/L
65	Hexachlorobutadiene	8270	10 ug/L	10 ug/L	10 ug/L
66	Hexachloroethane	8270	10 ug/L	10 ug/L	10 ug/L
67	Hexachloropentadiene	8270	10 ug/L	10 ug/L	10 ug/L
68	cyclo-Hexanone	8240	50 ug/L	50 ug/L	50 ug/L
69	2-Hexanone	8240	50 ug/L	50 ug/L	50 ug/L
70	Isobutanol	DAI or 8240	25 mg/L	25 mg/L	25 mg/L
71	Methanol	DAI	25 mg/L	25 mg/L	25 mg/L
72	Methylene chloride	8240	5 ug/L	5 ug/L	5 ug/L
73	4-Methyl-2-pentanone	8240	50 ug/L	50 ug/L	50 ug/L
74	Naphthalene	8270	10 ug/L	10 ug/L	10 ug/L
75	Nitrobenzene	8270	10 ug/L	10 ug/L	10 ug/L
76	Pentachlorophenol	8270	50 ug/L	50 ug/L	50 ug/L
77	Phenol	8270	10 ug/L	10 ug/L	10 ug/L
78	Pyridine	8270	10 ug/L	10 ug/L	10 ug/L

Table V-4  
GROUNDWATER CONSTITUENTS OF CONCERN (COCs)

Constituents of Concern		Test Method	Concentration Limit - Upper Perched Zone	Concentration Limit - Intermediate Perched Zone	Concentration Limit - Lower Water Table Zone
79	Styrene	8240	5 ug/L	5 ug/L	5 ug/L
80	1,1,2-2-Tetrachloroethane	8240	5 ug/L	5 ug/L	5 ug/L
81	Tetrachloroethylene	8240	5 ug/L	5 ug/L	5 ug/L
82	Toluene	8240	5 ug/L	5 ug/L	5 ug/L
83	1,1,1-Trichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
84	1,1,2-Trichloroethane	8240	5 ug/L	5 ug/L	5 ug/L
85	1,1,2-Trichloro-1,2,2-trifluoroethane	8240	5 ug/L	5 ug/L	5 ug/L
86	Trichloroethylene	8240	5 ug/L	5 ug/L	5 ug/L
87	2,4,5-Trichlorophenol	8270	10 ug/L	10 ug/L	10 ug/L
88	2,4,6-Trichlorophenol	8270	10 ug/L	10 ug/L	10 ug/L
89	Vinyl acetate	8240	50 ug/L	50 ug/L	50 ug/L
90	Vinyl chloride	8240	10 ug/L	10 ug/L	10 ug/L
91	Xylenes (total)	8240	5 ug/L	5 ug/L	5 ug/L
<u>Pesticide Parameters</u>					
92	Aldrin	8080	0.04 ug/L	0.04 ug/L	0.04 ug/L
93	Chlordane	8080	0.25 ug/L	0.25 ug/L	0.25 ug/L
94	2,4-D	8150	0.25 ug/L	0.25 ug/L	0.25 ug/L
95	DDT,DDE,DDD	8080	0.10, 0.04, 0.10 ug/L	0.10, 0.04, 0.10 ug/L	0.10, 0.04, 0.10 ug/L
96	Dieldrin	8080	0.025 ug/L	0.025 ug/L	0.025 ug/L
97	Endrin	8080	0.06 ug/L	0.06 ug/L	0.06 ug/L



Table V-4  
GROUNDWATER CONSTITUENTS OF CONCERN (COCs)

Constituents of Concern		Test Method**	Concentration Limit - Upper Perched Zone*	Concentration Limit - Intermediate Perched Zone*	Concentration Limit - Lower Water Table Zone*
98	Heptachlor epoxide	8080	0.05 ug/L	0.05 ug/L	0.05 ug/L
99	Kepone	8080	0.50 ug/L	0.50 ug/L	0.50 ug/L
100	Lindane	8080	0.04 ug/L	0.04 ug/L	0.04 ug/L
101	Methoxychlor	8080	0.50 ug/L	0.50 ug/L	0.50 ug/L
102	Mirex	8080	0.05 ug/L	0.05 ug/L	0.05 ug/L
103	Toxaphene	8080	1.0 ug/L	1.0 ug/L	1.0 ug/L
104	2,4,5-TP	8150	0.05 ug/L	0.05 ug/L	0.05 ug/L

Notes: \* Inorganic Detection Monitoring Parameters Concentration Limits will be updated annually or more frequently using prediction limits.  
 \*\* Permittee may use updated EPA analytical test methods when EPA publishes new approved analytical test methods.  
 TBD = To be determined; sufficient background data are not available to control experiment-wise error rate to approximately 5 percent and the individual monitoring point error rate to approximately one percent.  
 Concentration limits for organic monitoring parameters are based on the Estimated Quantification Limit (EQL) as listed in Manual SW-846, U.S. EPA, September 1994 or the most recent update, and as specified in Section 3.6 of the RMSP. However, sample EQLs are highly matrix dependent. The EQLs specified in this table are laboratory specific and may not always be achievable.  
 DAI = Direct aqueous injection.

TABLE V-5  
AIR MONITORING PARAMETERS

Volatile Organic Compounds

Benzene  
Ethylene dibromide  
Ethylene dichloride  
1,2-Dichlorobenzene  
Methylene chloride  
Phenol  
Tetrachloroethylene  
Toluene  
Total VOCs

Inorganic Substances

Arsenic  
Beryllium  
Cadmium  
Chromium (Total)  
Copper  
Lead  
Mercury  
Nickel  
Zinc



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Part VI. Corrective Action

A. Authority

H&S Code Section 25200.10 and 22 CCR Section 66264.801, require that permits issued by the Department must address corrective action for releases of hazardous waste, including hazardous constituents from any Solid Waste Management Unit (SWMU) at the Facility, regardless of when the waste was placed in the unit.

Failure to comply with any term or condition set forth in this Part of the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action and penalties pursuant to H&S Code Section 25187.

In addition, failure to submit the information required in this Part of the Permit, or falsification and/or mis-representation of any submitted information, is grounds for termination of this Permit. [22 CCR 66270.43]

Compliance by the Permittee with the terms of this Part of the Permit shall not relieve the Permittee of its obligation to comply with any other applicable local, state or federal laws or regulations including, but not limited to, Waste Discharge Requirements, cleanup and abatement orders or any other enforcement orders issued by a Regional Water Quality Control Board.

B. Statement of Purpose

The corrective action objective contained in this Part of the Permit is to continue corrective action at the Facility and to perform any other activities necessary to correct actual or potential threats to human health and/or the environment resulting from the release or potential release of hazardous waste or hazardous constituents at the Facility.

C. Definitions

The following is a list of definitions which apply to this Part of the Permit. Other terms shall be defined to be consistent with definitions listed in 22 CCR 66260.10 and H&S Code Section 25110.

"Action Levels" means health- and environmental-based levels determined by U.S. EPA to be indicators for protection of human health and/or the environment. Contamination exceeding action levels indicates a potential threat to human health and/or the environment which may require further study. Action levels are also used as a reference point for developing final cleanup standards.

"Day" means a calendar day. Periods of time are calculated by excluding the first day and including the last. If the last day is a Saturday, Sunday or other holiday specified in Government Code section 6700, it is also excluded.

"Facility" means all contiguous land and structures, other appurtenances and improvements on the land used for the treatment, transfer, storage, resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling hazardous waste management units or combinations of these units.

"Hazardous Constituent" means a constituent identified in Appendix VIII to Chapter 11, Division 4.5, Title 22, CCR; or any other element, chemical compound, or mixture of compounds which is a component of a hazardous waste or leachate and which has a physical or chemical property that causes the waste or leachate to be identified as a hazardous waste.

"Hazardous Waste" means a hazardous waste as defined in 22 CCR 66261.3. Hazardous waste includes extremely hazardous waste, acutely hazardous waste, RCRA hazardous waste, non-RCRA hazardous waste and special waste.

"Release" means release as defined in 22 CCR 66260.10.

"Solid Waste Management Unit" or "SWMU" means any unit at a hazardous waste facility from which hazardous constituents might migrate, irrespective of whether the units were intended for the management of wastes, including but not limited to: containers, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators and underground injection wells.

"Waste" means waste as defined in 22 CCR 66261.2.



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D. Summary of Continuing Corrective Action Implementation

1. A RCRA Facility Assessment (RFA) dated September 30, 1987, prepared by A.T. Kearney for the U.S. EPA identified 26 Solid Waste Management Units at the Petroleum Waste Incorporated (PWI) Facility. The 26 SWMUs were all originally liquid petroleum waste evaporation ponds. The 26 SWMUs are identified at the Facility as Waste Management Units (WMUs) 1-17, 19, 20, 24, 25, T-1, R-1, R-2, R-3, and R-4. Four of the SWMUs received RCRA liquid and solid hazardous wastes, the other 22 WMUs received non-RCRA liquid and solid hazardous wastes. Site characterization and cleanup of the SWMUs were addressed in documents entitled "Unit Specific Closure Plans Existing RCRA Surface Impoundments Volume I" and "Unit Specific Closure Plans Existing Surface Impoundments Volumes I, II, and III", dated March 8, 1991. The SWMUs are required to be clean closed. To accomplish this, all contaminated soil and synthetic liner material must be removed and disposed of in a Class I landfill. The soil underlying the SWMUs is to be sampled for a list of parameters including metals, semi-volatile and volatile organics and statistically compared to concentrations from background samples.
2. The SWMUs varied in surface area from 1.3 acres to 5.6 acres; the capacities varied from 15,400 cubic yards to 156,000 cubic yards; and the depths varied from 10 feet to 35 feet. The SWMUs were constructed and put in operation over a period of time from 1982 until 1986. Wastes were received until June 30, 1988, which is the date the Toxic Pits Cleanup Act became effective and prohibited the disposal of liquid wastes. All of the SWMUs were constructed with a minimum of 1 synthetic liner and 1 clay liner, while some SWMUs had up to 3 synthetic liners and 3 clay liners. To date 16 of the 26 SWMUs (SWMUs R-1, R-2, R-3, R-4, T-1, 1-5, 7, 8, 11, 13, 17, and 24) had achieved the goal of removal of all liquid and solid waste constituents and all contaminated soil to background concentrations.
3. The remaining SWMUs which need to be cleaned up as a part of this Permit modification are SWMUs 6, 9, 10, 12, 14, 15, 16, 19, 20, and 25.
4. To date over 1 million cubic yards of contaminated soil and liner material has been removed from these SWMUs. The contaminated soil and liner has been disposed of in an on-site permitted hazardous waste landfill.

E. Project Coordinator

The Project Coordinator representing the Facility is:

Mr. David Nielsen

The Project Coordinators representing the Department are:

Mr. Chuck Snyder

Mr. Tony Hashemian

1. The Permittee shall provide at least seven (7) days written notice to the Department prior to changing Project Coordinator.
2. The absence of the Department Project Coordinator from the Facility shall not be cause for the stoppage of work.

F. Work to be Performed

The Permittee shall perform the work specified in this Part of the Permit in the manner and by the dates previously submitted. All work undertaken pursuant to this Part of the Permit shall be performed in a manner consistent with documents entitled "Unit Specific Closure Plans Existing Surface Impoundments Volume I, II, and III", other Department approved Workplans, and applicable State law and implementing regulations. All attachments to this Permit are incorporated by reference as if fully set forth herein.

The Permittee shall complete the tasks required by this Part of the Permit in accordance with the approved schedules of compliance. Schedules of compliance may provide for implementation of tasks beyond the termination date of this Permit. All corrective action shall continue until the media cleanup standards are achieved and all required work has been completed.



G. Department Approval/Reporting/Proposed Contractor/Additional Work

1. Department Approval

- a. The Permittee shall revise any workplan, report, specification or schedule in accordance with the Department's written comments. The Permittee shall submit to the Department any revised submittal in accordance with a due date specified by the Department. Revised submittal are subject to Department approval or disapproval, with comments and/or modification.
- b. Upon receipt of the Department's written approval, the Permittee shall commence work and implement any approved workplan or plan in accordance with the schedule and provisions contained therein.
- c. A Department approved workplan, report, specification or schedule shall be deemed incorporated into this Permit. Any non-compliance with such approved workplans, reports, specifications or schedules shall be considered non-compliance with this Permit.

2. Reporting

- a. The Permittee shall provide the Department with a quarterly construction progress report of corrective action/construction activities conducted and to be conducted pursuant to this Part of the Permit.
- b. Any report or other document submitted by the Permittee pursuant to this Part of the Permit shall be signed and certified by a responsible corporate officer of the Permittee or a duly authorized representative in accordance with 22 CCR 66270.11.
- c. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices or other submissions relating to or required under this Part of the Permit shall be in writing and shall be sent to the respective Project Coordinators.

3. Proposed Contractor/Consultant

All work performed pursuant to this Part of the Permit shall be under the direction and supervision of a California registered professional engineer, hydrologist or geologist with expertise in hazardous waste site cleanup. The Permittee's contractor or consultant shall have the technical expertise sufficient to adequately perform all aspects of the work for which they are responsible.

4. Additional Work

The Department may determine or the Permittee may propose that certain tasks, including investigatory work, remedial action, engineering evaluation or procedure/methodology modification are necessary in addition to, or in lieu of, the tasks and deliverables included in any workplan approved by the Department. The Department shall request in writing that the Permittee perform the additional work and shall specify the basis and reasons for the Department's determination that the additional work is necessary. Within 14 days after the receipt of such determination, the Permittee shall have the opportunity to meet or confer with the Department to discuss the additional work the Department has requested. If required by the Department, the Permittee shall submit a workplan to the Department for additional work. Such workplan shall be submitted to the Department according to a schedule established by the Department. Upon approval of a workplan, the Permittee shall implement it in accordance with the provisions and schedule contained therein.

H. Quality Assurance

1. The workplan shall contain requirements for QA/QC and chain of custody procedures for all sampling, monitoring and analytical activities.
2. The name of the California State certified analytical laboratories the Permittee proposes to use must be specified in all future workplans.
3. All workplans required under this Part of the Permit shall include data quality objectives for each data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended use.



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4. The Permittee shall ensure that data of appropriate quality are obtained by its consultant or contract laboratories. The Permittee shall ensure that California State Certified laboratories used by the Permittee have in place a quality assurance program plan and perform analyses according to the latest approved edition of "Test Methods for Evaluating Solid Waste, (SW-846)", or other methods deemed satisfactory by the Department. If methods other than standard methods are to be used, the Permittee shall specify all such methods in the applicable workplan (e.g., RFI workplan). The Department may reject any data that does not meet the requirements of the approved workplan or the analytical methods and may require resampling and analysis.
5. The Department may conduct a performance and quality assurance/quality control audit of the laboratories chosen by the Permittee before, during or after sample analyses. Upon request by the Department, the Permittee shall have its selected California State certified laboratory perform analyses of samples provided by the Department to demonstrate laboratory performance. If the audit reveals deficiencies in a laboratory's performance or quality assurance/quality control, resampling and analysis may be required.

I. Sampling/Access

1. Sampling

- a. The Permittee shall notify the Department prior to beginning each separate phase of field work approved under any workplan required by this Part of the Permit. If the Permittee believes it must commence emergency field activities without delay, the Permittee may seek emergency telephone authorization from the Department Project coordinator or, if the Project Coordinator is unavailable, his/her immediate supervisor, to commence such activities immediately. At the request of the Department, the Permittee shall provide or allow the Department or its authorized representative to take split or duplicate samples of all samples collected by the Permittee pursuant to this Part of the Permit.
- b. The Permittee shall submit to the Department upon request the results of all sampling and/or tests or other data generated by its employees, divisions, agents, consultants or contractors pursuant to this Permit.

- c. Notwithstanding any other provisions of this Permit, the Department retains all of its information gathering and inspection authority and rights including enforcement actions related thereto under H&S Code and any other applicable state or federal statutes or regulations.

2. Access

- a. The Department, its contractors, employees, and/or any U.S. EPA representatives are authorized to enter and freely move about the Facility pursuant to this Part of the Permit for the purposes of: interviewing Facility personnel and contractors; inspecting records, operating logs and contracts related to the Facility; reviewing the progress of the Permittee in carrying out the terms of this Part of the Permit; conducting such tests, sampling or monitoring as the Department or its Project Coordinator deems necessary; using a camera, sound recording or other documentary type equipment; and verifying the reports and data submitted to the Department by the Permittee. The Permittee shall provide the Department and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of this Part of the Permit and shall permit such persons to inspect and copy all records, files, photographs and documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Part of the Permit.
- b. To the extent that work being performed pursuant to this Part of the Permit must be done on property not owned or controlled by the Permittee, the Permittee shall use its best efforts to obtain access agreements necessary to complete work required by this Part of the Permit from the present owner(s) of such property within 30 days of approval of any workplan for which access is required. Best efforts as used in this paragraph shall include, at a minimum, a certified letter from the Permittee to the present owner(s) of such property requesting access agreement(s) to allow the Permittee and the Department and its authorized representatives access to such property and the payment of reasonable sums of money in consideration of granting access. The Permittee shall provide the Department Project Coordinator with a copy of any access agreement(s). In the event that agreements for access are not obtained within 30 days of approval of any workplan for which access is required, or of the date that the need for access becomes



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known to the Permittee, the Permittee shall notify the Department in writing within fourteen (14) days thereafter regarding both the efforts undertaken to obtain access and its failure to obtain such agreements. In the event the Department obtains access, the Permittee shall undertake approved work on such property.

- c. Nothing in this Part of the Permit shall be construed to limit or otherwise affect the Permittee's liability and obligation to perform corrective action including corrective action beyond the Facility boundary, notwithstanding the lack of access. The Department may determine that additional on-site measures must be taken to address releases beyond the Facility boundary if access to off-site areas cannot be obtained.
- d. Nothing in this section limits or otherwise affects the Department's right of access and entry pursuant to any applicable state or federal laws and regulations.

J. Record Preservation

- 1. The Permittee shall retain, during the term of this Permit, all data, records and documents gathered or generated during activities undertaken pursuant to this Part of the Permit. All such documents shall be stored in a centralized location at the Facility (or other location approved by the Department) and be made available to the Department or its representatives upon request. The Permittee shall notify the Department in writing at least 90 days prior to final expiration of this Permit and shall provide the Department with the opportunity to take possession of any such records. Such written notification shall reference this Permit (including expiration date) and shall be addressed to the Department Project Coordinator.
- 2. The Permittee shall obtain copies of all data, records and documents gathered or generated by any agent, consultant or contractor employed by the Permittee to carry out the terms of this Part of the Permit.

K. Dispute Resolution

- 1. The Department and the Permittee shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion related to this part of the Permit.

2. If the Permittee disagrees, in whole or in part, with any written decision by the Department relating to Department modification of interim deliverables submitted by the Permittee or to additional work required by the Department pursuant to this Part of the Permit, the Permittee Project Coordinator shall orally notify the Department Project Coordinator of the dispute. The Project Coordinators shall attempt to resolve the dispute informally.
3. If the Project Coordinators cannot resolve the dispute informally, the Permittee may pursue the matter formally by placing its objections in writing. The Permittee's written objection must set forth the specific points of the dispute and the basis for the Permittee's position.
4. The Department and the Permittee shall have 14 days from the Department's receipt of the Permittee's written objections to attempt to resolve the dispute through formal discussions. This time period may be extended by the Department for good cause. During such time period, the Permittee will have an opportunity to meet or confer with the Department to discuss the dispute and the Permittee's objections.
5. After the formal discussion period, the Department will provide the Permittee with its written decision on the dispute. The Department's written decision will reflect any agreements reached during the formal discussion period. The decision shall be incorporated into and become an enforceable part of this Permit. The decision is not subject to further dispute resolution.
6. If the Permittee fails to follow any of the requirements contained in this Part of the Permit, it shall have waived its right to further consideration of the disputed issue.
7. The existence of a dispute as defined herein, and the Department's consideration of such matters as placed into dispute, shall not excuse, toll or suspend any compliance obligation or deadline required pursuant to this Part of the Permit during the pendency of the dispute resolution process.

L. Modification

1. The Permittee must request a permit modification to revise any submittal dates specified in this Part of the Permit. To request such a revision, the Permittee must use the procedures for a Class 1 permit modification and must obtain prior approval from the Department, in accordance with 22 CCR 66270.42.



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Such requests must be timely and provide justification for any proposed submittal date revisions.

2. If at any time the Department determines that modification of this Part of the Permit is necessary, the Department may initiate a modification to this Part of the Permit according to the procedures in 22 CCR 66270.41.
3. Any requests for a revision of an approved workplan (or plan) requirement must be in writing. Such requests must be timely and provide justification for any proposed workplan revision. The Department has no obligation to approve such requests, but if it does so, such approval will be in writing. Any approved workplan modification shall be incorporated by reference into this Permit.

Part VII. Compliance Schedule

The following is a schedule of selected compliance activities the Permittee must complete by the dates or periods indicated. This schedule is included for Department planning purposes only and is not a comprehensive list of all activities and submittals required by this Permit.

A. Items due by a specific date

1. Due by April 6, 1996. Upon the effective date of this Permit, the Permittee shall add potassium to the quarterly groundwater monitoring program. After the collection of three (3) years of quarterly analytical data, the Department will determine if potassium should be permanently added to the quarterly monitoring program. [Part V.C.5.o.]
2. Due by July 5, 1996. No later than 90 days after the effective date of this Permit, the Permittee shall prepare and submit a Post-Earthquake Inspection and Response Plan to the Department. [Part II.J.2.]
3. Due by July 5, 1996. No later than 90 days from the effective date of this permit, Laidlaw shall submit to the Department a modification to the construction requirements for the Container Storage Area as described on page 2-8 of the Approved Part B application to agree with the construction requirements contained in Chapter 4.3 of the Approved Part B application. [Part III.B.1.]
4. Due by July 5, 1996. Within 90 days of the effective date of this Permit, the Permittee shall begin construction of the proposed groundwater monitoring wells listed in Table V-1., with the exception of wells for WMU 35. [Part V.C.1.b.]
5. Due by April 5, 1997. No later than 365 days from the effective date of this Permit, the Permittee shall submit a workplan describing its monitoring and response program in accordance with the requirements of 22 CCR 66264.701. [Part V.D.1.]



6. Due by April 5, 1997. Table V-4 of this Permit lists the Constituents of Concern (COCs) and their respective water quality protection standards. The Permittee shall collect and analyze groundwater samples for the COCs listed in Table V-4 within one year from the effective date of this Permit....  
[Part V.C.3.d.]
7. Due by April 5, 1997. No later than 365 days from the effective date of this Permit, the Permittee shall establish and submit to the Department the concentration limit for a hazardous constituent in the open air immediately down wind from the regulated WMUs in accordance with 22 CCR 66264.704(c). [Part V.D.3.]

B. Monthly activities

The Permittee shall monitor the unsaturated zone of WMU 34 monthly until one year of monitoring data has been collected to establish baseline (background) moisture conditions. [Part V.B.7.]

C. Quarterly submittals

1. The Permittee shall monitor the unsaturated zone of WMU 33 with a neutron probe system during the months of February, May, August, and November of each year. [Part V.B.6.]
2. The Permittee shall monitor the unsaturated zone of WMU 34 monthly until one year of monitoring data has been collected to establish baseline (background) moisture conditions. After the completion of one year of monthly data, the Permittee shall monitor WMU 34 during the months of February, May, August, and November of each year. [Part V.B.7.]
3. The Permittee shall collect and analyze groundwater samples from the background and point of compliance monitoring wells listed in Table V-1 of this Permit on a quarterly frequency during the active life of the Facility. The quarterly sampling of wells shall commence during the months of February, May, August, and November of each year. [Part V.C.3.a.]

D. Annual submittals

1. The Permittee shall adjust the closure cost estimate for inflation and shall submit the adjusted cost estimate to the Department by March 1st of each year for review and approval in the form of a letter of acceptance. [Part II.A.4.]
2. The Permittee shall adjust the post-closure cost estimate for inflation and submit the adjusted cost estimate to the Department by March 1st of each year during the operating life of the Facility as specified in 22 CCR 66264.144(b). [Part II.A.7.]
3. The Permittee shall submit to the Department a vadose zone monitoring report by March 30 of each year which contains a summary of the monitoring data for WMUs 33, 34 and 35 as regulated units are constructed. [Part V.B.8.]
4. The Permittee shall submit to the Department an annual groundwater monitoring report by March 30 of each year which contains graphs of all analytical data from each point of compliance and background monitoring well. [Part V.C.5.c.]
5. The Permittee shall make the Waste Minimization certification by March 31st of each year. [Part II.Q.]
6. The Permittee shall submit an annual color aerial photograph of the active portion of the Facility to the Department no later than July 1st of each year. [Part II.P.]

E. Five year submittals

1. The background water quality concentration limits and control charts for the inorganic constituents of concern shall be updated at a minimum every five years from the effective date of this Permit. [Part V.C.4.c.]
2. Table V-4 of this Permit lists the Constituents of Concern (COCs) and their respective water quality protection standards. The Permittee shall collect and analyze groundwater samples for the COCs listed in Table V-4 within one year from the effective date of this Permit and every five years thereafter during the active life of the Facility. [Part V.C.3.d.]



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit T-1

**UNIT LOCATION:** The southeast corner of WMU T-1 is approximately 600 feet North and 1400 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU T-1 has a surface area of approximately 1.9 acres. WMU T-1 was completed in May 1986. WMU T-1 is approximately 250 feet wide by 480 feet long with an average depth of 16 feet. The capacity is approximately 18,700 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 18,700 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/94

**COMMENTS:** See the Closure certification reports for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 1

**UNIT LOCATION:** The southeast corner of WMU 1 is approximately 200 feet North and 350 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 1 has a surface area of approximately 1.4 acres. WMU 1 was completed in November 1982. WMU 1 is approximately 165 feet wide by 360 feet long with an average depth of 10 feet. The capacity is approximately 15,400 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 15,400 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 2

**UNIT LOCATION:** The southeast corner of WMU 2 is approximately 450 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 2 has a surface area of approximately 1.8 acres. WMU 2 was completed in August 1987. WMU 2 is approximately 160 feet wide by 505 feet long with an average depth of 13 feet. The capacity is approximately 20,800 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 20,800 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 3

**UNIT LOCATION:** The southeast corner of WMU 3 is approximately 650 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 3 has a surface area of approximately 1.9 acres. WMU 3 was completed in March 1983. WMU 3 is approximately 180 feet wide by 465 feet long with an average depth of 15 feet. The capacity is approximately 27,850 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 27,850 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 4

**UNIT LOCATION:** The southeast corner of WMU 4 is approximately 850 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 4 has a surface area of approximately 1.3 acres. WMU 4 was completed in August 1983. WMU 4 is approximately 125 feet wide by 430 feet long with an average depth of 19 feet. The capacity is approximately 17,250 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 17,250 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 5

**UNIT LOCATION:** The southeast corner of WMU 5 is approximately 1000 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 5 has a surface area of approximately 2.1 acres. WMU 5 was completed in June 1983. WMU 5 is approximately 285 feet wide by 340 feet long with an average depth of 19 feet. The capacity is approximately 33,350 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 33,350 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 7

**UNIT LOCATION:** The southeast corner of WMU 7 is approximately 1500 feet North and 600 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 7 has a surface area of approximately 2.5 acres. WMU 7 was completed in October 1983. WMU 7 is approximately 200 feet wide by 530 feet long with an average depth of 25 feet. The capacity is approximately 51,350 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 51,350 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 8

**UNIT LOCATION:** The southeast corner of WMU 8 is approximately 1300 feet North and 650 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 8 has a surface area of approximately 2.0 acres. WMU 8 was completed in November 1983. WMU 8 is approximately 200 feet wide by 430 feet long with an average depth of 25 feet. The capacity is approximately 40,950 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 40,950 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 11

**UNIT LOCATION:** The southeast corner of WMU 11 is approximately 1800 feet North and 500 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 11 has a surface area of approximately 4.5 acres. WMU 11 was completed in January 1984. WMU 11 is approximately 285 feet wide by 680 feet long with an average depth of 18 feet. The capacity is approximately 94,600 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 94,600 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 12

**UNIT LOCATION:** The southeast corner of WMU 12 is approximately 2100 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 12 has a surface area of approximately 5.3 acres. WMU 12 was completed in April 1984. WMU 12 is approximately 275 feet wide by 830 feet long with an average depth of 18 feet. The capacity is approximately 111,450 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN  
CAPACITY:** Approximately 111,450 Cubic Yards.

**OPERATING  
CAPACITY:** Same

**OPERATING  
STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 13

**UNIT LOCATION:** The southeast corner of WMU 13 is approximately 1550 feet North and 1100 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 13 has a surface area of approximately 2.6 acres. WMU 13 was completed in April 1984. WMU 13 is approximately 280 feet wide by 410 feet long with an average depth of 18 feet. The capacity is approximately 39,500 cubic yards.

**ACTIVITY:** This unit was closed in accordance with the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the Closure Plan requirements.

**DESIGN CAPACITY:** Approximately 39,500 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.

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**ACTIVITY UNIT:** Waste Management Unit 24

**UNIT LOCATION:** The southeast corner of WMU 24 is approximately 3350 feet North and 1550 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 24 has a surface area of approximately 3.6 acres. WMU 24 was completed in September 1986. WMU 24 is approximately 270 feet wide by 630 feet long with an average depth of 35 feet. The capacity is approximately 156,000 cubic yards.

**ACTIVITY:** This unit has been closed as required by the Corrective Measures Implementation (CMI). This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. The sludges and solid wastes were then solidified and excavated. The excavated wastes were then removed and disposed of in an on-site Class I landfill. All visibly contaminated wastes were removed and then soil samples were taken and statistically compared to background samples to determine compliance with the CMI requirements. If the results meet the requirements in the CMI, no further action is necessary. If the results do not meet the requirements of the CMI, then further excavation and sampling is required until the results satisfy the requirements of the CMI.

**DESIGN  
CAPACITY:** Approximately 156,000 Cubic Yards

**OPERATING  
CAPACITY:** Same

**OPERATING  
STATUS:** Clean closed surface impoundment / Closure certified 6/30/95

**COMMENTS:** See the Closure certification reports for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 6

**UNIT LOCATION:** The southeast corner of WMU 6 is approximately 1300 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 6 has a surface area of approximately 1.9 acres. WMU 6 was completed in September 1985. WMU 6 is approximately 220 feet wide by 400 feet long with an average depth of 26 feet. The capacity is approximately 42,000 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 42,000 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 9

**UNIT LOCATION:** The southeast corner of WMU 9 is approximately 1000 feet North and 800 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 9 has a surface area of approximately 3.2 acres. WMU 9 was completed in December 1983. WMU 9 is approximately 295 feet wide by 450 feet long with an average depth of 25 feet. The capacity is approximately 65,900 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN  
CAPACITY:** Approximately 65,900 Cubic Yards

**OPERATING  
CAPACITY:** Same

**OPERATING  
STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 10

**UNIT LOCATION:** The southeast corner of WMU 10 is approximately 600 feet North and 1000 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 10 has a surface area of approximately 2.5 acres. WMU 10 was completed in January 1984. WMU 10 is approximately 295 feet wide by 385 feet long with an average depth of 23 feet. The capacity is approximately 52,400 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 52,400 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 14

**UNIT LOCATION:** The southeast corner of WMU 14 is approximately 1550 feet North and 1100 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 14 has a surface area of approximately 2.6 acres. WMU 14 was completed in September 1984. WMU 14 is approximately 280 feet wide by 415 feet long with an average depth of 15 feet. The capacity is approximately 42,000 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 42,000 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.



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**ACTIVITY UNIT:** Waste Management Unit 15

**UNIT LOCATION:** The southeast corner of WMU 15 is approximately 2450 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 15 has a surface area of approximately 5.3 acres. WMU 15 was completed in May 1984. WMU 15 is approximately 265 feet wide by 845 feet long with an average depth of 25 feet. The capacity is approximately 111,900 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 111,900 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 16

**UNIT LOCATION:** The southeast corner of WMU 16 is approximately 2750 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 16 has a surface area of approximately 5.6 acres. WMU 16 was completed in January 1985. WMU 16 is approximately 290 feet wide by 825 feet long with an average depth of 25 feet. The capacity is approximately 121,250 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 121,250 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 17

**UNIT LOCATION:** The southeast corner of WMU 17 is approximately 3100 feet North and 200 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 17 has a surface area of approximately 4.9 acres. WMU 17 was completed in April 1985. WMU 17 is approximately 253 feet wide by 845 feet long with an average depth of 25 feet. The capacity is approximately 98,150 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 98,150 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.

March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 19

**UNIT LOCATION:** The southeast corner of WMU 19 is approximately 3100 feet North and 1150 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 19 has a surface area of approximately 3.4 acres. WMU 19 was completed in October 1985. WMU 19 is approximately 340 feet wide by 450 feet long with an average depth of 30 feet. The capacity is approximately 70,100 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 70,100 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.



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**ACTIVITY UNIT:** Waste Management Unit 20

**UNIT LOCATION:** The southeast corner of WMU 20 is approximately 3550 feet North and 1150 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 20 has a surface area of approximately 3.1 acres. WMU 20 was completed in March 1986. WMU 20 is approximately 340 feet wide by 390 feet long with an average depth of 30 feet. The capacity is approximately 63,850 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 63,850 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS:** See the Unit Specific Closure Plans for additional information.

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Laidlaw Environmental Services (Lokern), Inc.

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**ACTIVITY UNIT:** Waste Management Unit 25

**UNIT LOCATION:** The southeast corner of WMU 25 is approximately 4000 feet North and 1550 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 25 has a surface area of approximately 2.4 acres. WMU 25 was completed in May 1986. WMU 25 is approximately 285 feet wide by 400 feet long with an average depth of 27 feet. The capacity is approximately 37,650 cubic yards.

**ACTIVITY:** This unit is being closed as approved in the "Unit Specific Closure Plans, Existing Surface Impoundments, Volumes I through IV," (Closure Plan) dated March 8, 1991, including three revisions dated June 10, 1992, November 13, 1992 and May 26, 1995. This unit was a surface impoundment and was forced to stop receiving waste under the Toxic Pit Cleanup Act (TPCA). Under TPCA liquid wastes were not allowed to be disposed of after June 30, 1988. The liquid wastes in this unit were treated and/or evaporated. All visibly contaminated wastes are being removed soil samples will then be taken and statistically compared to background samples to determine compliance with the Closure Plan requirements. If the results meet the requirements in the Closure Plan, no further action is necessary. If the results do not meet the requirements of the Closure Plan, then further excavation and sampling will be required until the results satisfy the requirements of the Closure Plan.

**DESIGN CAPACITY:** Approximately 37,650 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Surface impoundment undergoing clean closure.

**COMMENTS** See the Unit Specific Closure Plans for additional information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 28

**UNIT LOCATION:** The southeast corner of WMU 28 is approximately 2300 feet North and 1500 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 28 has a surface area of approximately 6.3 acres. WMU 28 was completed in October 1987. WMU 28 is approximately 330 feet wide by 830 feet long with an average depth of 40 feet. The capacity is approximately 340,000 cubic yards.

**ACTIVITY:** Wastes must first pass the paint filter test prior to being placed in the landfill. The landfill may accept bulk solid loads, unpackaged and consolidated packaged laboratory chemicals, solid drum wastes, and waste processed through the Stabilization Treatment Unit.

**DESIGN  
CAPACITY:** Approximately 340,000 Cubic Yards

**OPERATING  
STATUS:** Active landfill / WMU nearly full, should begin closure early 1996.

**RCRA WASTES:** See the Approved RCRA Part B Permit Application.

**RCRA EXCLUDED  
WASTES:** Wastes not accepted at this facility are: Infectious wastes, Nuclear Regulatory Commission regulated radiological wastes, Polychlorinated biphenyls (PCB's) as defined by 40 CFR 761, Class A explosives, Dioxin contaminated wastes defined in CFR 261 (F020, F021, F022, F023, F026, F027), Sewage wastes, and Compressed gasses (will be accepted for off-site transfer)

**STATE WASTES:** See the Approved RCRA Part B Permit Application.

**WASTE  
GENERATION:** The only waste generated by this unit is leachate F039. The leachate is managed as required by State and Federal regulation.

**WASTE  
DISPOSAL:** Landfill is permanent will receive cap and cover and will be closed in place.

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Laidlaw Environmental Services (Lokern), Inc.

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**HAZARDOUS  
MATERIALS:**

See Part B application

**COMMENTS:**

Activates at this facility are complex and very detailed see Part B Application and supporting documents for specific information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 33

**UNIT LOCATION:** The southeast corner of WMU 33 is approximately 2400 feet North and 1900 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 33 has a surface area of approximately 24.4 acres. WMU 33 was completed in late 1990. WMU 33 is approximately 550 feet wide by 1,600 feet long with an average depth of 60 feet. The capacity is approximately 1,850,000 cubic yards.

**ACTIVITY:** Wastes must first pass the paint filter test prior to being placed in the landfill. The landfill may accept bulk solid loads, unpackaged and consolidated packaged laboratory chemicals, solid drum wastes, and waste processed through the Stabilization Treatment Unit.

**DESIGN CAPACITY:** Approximately 1,850,000 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Active landfill / Fully operational.

**RCRA WASTES:** See the Approved RCRA Part B Permit Application.

**RCRA EXCLUDED WASTES:** Wastes not accepted at this facility are: Infectious wastes, Nuclear Regulatory Commission regulated radiological wastes, Polychlorinated biphenyls (PCB's) as defined by 40 CFR 761, Class A explosives, Dioxin contaminated wastes defined in CFR 261 (F020, F021, F022, F023, F026, F027), Sewage wastes, and Compressed gasses (will be accepted for off-site transfer)

**STATE WASTES:** See the Approved RCRA Part B Permit Application.

**WASTE GENERATION:** The only waste generated by this unit is leachate F039. The leachate is managed as required by State and Federal regulation.

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Laidlaw Environmental Services (Lokern), Inc.

March 7, 1996

**WASTE  
DISPOSAL:** Landfill is permanent will receive cap and cover and will be closed in place.

**HAZARDOUS  
MATERIALS:** See Part B application

**COMMENTS:** Activates at this facility are complex and very detailed see Part B Application and supporting documents for specific information.



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Laidlaw Environmental Services (Lokern), Inc.

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**ACTIVITY UNIT:** Waste Management Unit 34

**UNIT LOCATION:** The southeast corner of WMU 34 is approximately 1700 feet North and 1500 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 34 began construction in July 1994, however construction was halted due to weather conditions. Construction was completed in August 1995. WMU 34 has a surface area of approximately 7.0 acres. WMU 34 will be approximately 538 feet long and 550 feet wide with an average depth of approximately 40 feet. The capacity will be approximately 345,000 cubic yards. The liner system will consist of clay liners, drainage layers, and 80-mil HDPE liners. Construction of WMU 34 should be completed by fall 1995.

**ACTIVITY:** Wastes must first pass the paint filter test prior to being placed in the landfill. The landfill may accept bulk solid loads, unpackaged and consolidated packaged laboratory chemicals, solid drum wastes, and waste processed through the Stabilization Treatment Unit.

**DESIGN CAPACITY:** Approx. 360,000 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Pending approval by DTSC and RWQCB of the construction certification report.

**RCRA WASTES:** See the Approved RCRA Part B Permit Application.

**RCRA EXCLUDED WASTES:** Wastes not accepted at this facility are: Infectious wastes, Nuclear Regulatory Commission regulated Radiological wastes, Polychlorinated biphenyls (PCB's) as defined by 40 CFR 761, Class A explosives, Dioxin contaminated wastes defined in CFR 261 (F020, F021, F022, F023, F026, F027), Sewage wastes, and Compressed gasses (will be accepted for off-site transfer)

**STATE WASTES:** See the Approved RCRA Part B Permit Application.

Hazardous Waste Facility Permit  
Laidlaw Environmental Services (Lokern), Inc.

March 7, 1996

**WASTE  
GENERATION:** The only waste which will be generated by this unit is leachate F039.  
The leachate is managed as required by State and Federal regulation.

**WASTE  
DISPOSAL:** Landfill is permanent will receive cap and cover and will be closed in  
place.

**HAZARDOUS  
MATERIALS:** See Part B application

**COMMENTS:** Activates at this facility are complex and very detailed see Part B  
Application and supporting documents for specific information.



March 7, 1996

**ACTIVITY UNIT:** Waste Management Unit 35

**UNIT LOCATION:** The southeast corner of WMU 35 is approximately 100 feet North and 100 feet west of the southeast corner of the facility boundary.

**DESCRIPTION:** WMU 35 will have a surface area of approximately 90 acres and a capacity of approximately 10,700,000 cubic yards with an average depth of approximately 85 feet below existing ground surface. WMU 35 will be constructed in an area formerly occupied by WMUs 1-17, RCRA WMUs 1-4, and WMU T-1. WMU 35 will be built in a progressive trench design and will consist of nine cells approximately 10 surface acres each.

**ACTIVITY:** Wastes must first pass the paint filter test prior to being placed in the landfill. The landfill may accept bulk solid loads, unpackaged and consolidated packaged laboratory chemicals, solid drum wastes, and waste processed through the Stabilization Treatment Unit.

**DESIGN CAPACITY:** Approx. 10,700,000 Cubic Yards

**OPERATING CAPACITY:** Same

**OPERATING STATUS:** Future permitted unit.

**RCRA WASTES:** See the Approved RCRA Part B Permit Application.

**RCRA EXCLUDED WASTES:** Wastes not accepted at this facility are: Infectious wastes, Nuclear Regulatory Commission regulated radiological wastes, Polychlorinated biphenyls (PCB's) as defined by 40 CFR 761, Class A explosives, Dioxin contaminated wastes defined in CFR 261 (F020, F021, F022, F023, F026, F027), Sewage wastes, and Compressed gasses (will be accepted for off-site transfer)

**STATE WASTES:** See the Approved RCRA Part B Permit Application.

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Laidlaw Environmental Services (Lokern), Inc.

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**WASTE**

**GENERATION:** The only waste to be generated by this unit is leachate F039. The leachate is managed as required by State and Federal regulation.

**WASTE**

**DISPOSAL:** Landfill is permanent will receive cap and cover and will be closed in place.

**HAZARDOUS  
MATERIALS:**

See Part B application

**COMMENTS:**

Activates at this facility are complex and very detailed see Part B Application and supporting documents for specific information.



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**ACTIVITY UNIT:** Container Storage Area

**DESCRIPTION:** The Container Storage Area (CSA) will be an outdoor, curbed, concrete structure constructed in four phases with secondary containment. The storage unit will be located to the northwest of the Stabilization Treatment Unit (STU). The CSA will be 550 feet long by 400 feet wide.

**ACTIVITY:** The CSA is used for the outdoor storage of roll-off bins containing wastes treated in the STU that do not meet treatment standards, oversized waste containers associated with STU operations, and Baker tanks or other containers holding run-off and leachate from waste management units at the facility. In addition, containers containing waste from the STU which meet treatment standards, may be stored in the CSA prior to placement in the landfill. The CSA will also provides a temporary area for off-specification waste in roll-off bins following treatment at the STU.

**DESIGN  
CAPACITY:** Approximately 2, 360,880 Gallons.

**OPERATING  
CAPACITY:** Same

**OPERATING  
STATUS:** Future permitted unit.

**RCRA WASTES:** See the Approved RCRA Part B Permit Application.

**RCRA EXCLUDED  
WASTES:** Wastes not accepted at this facility are: Infectious wastes, Nuclear Regulatory Commission regulated radiological wastes, Polychlorinated biphenyls (PCB's) as defined by 40 CFR 761, Class A explosives, Dioxin contaminated wastes defined in CFR 261 (F020, F021, F022, F023, F026, F027), Sewage wastes, and Compressed gasses (will be accepted for off-site transfer)

**STATE WASTES:** See the Approved RCRA Part B Permit Application.

March 7, 1996

**ACTIVITY UNIT:** Stabilization Treatment Unit

**UNIT LOCATION:** The Stabilization Treatment Unit (STU) is located directly south of WMU 34.

**DESCRIPTION**

**AND ACTIVITY:** The STU is designed to convert incoming solids, liquids, and sludges to a non-reactive solid waste product that meets the land disposal restrictions of 40 CFR 268 and 22 CCR 66268, thus allowing subsequent placement of wastes in a landfill. The STU will treat wastes through blending, neutralization, and stabilization via addition of Pozzolanic and cementitious materials. The STU includes a truck wash station, bulk waste unloading bays and an auger shredder, with capability to add an additional auger shredder or pug mill. The STU includes the Drum Handling and Storage Area (DHSA) for receiving, storing, transferring and repackaging containerized wastes. Process residuals from the STU will include treated waste product, oversized solids, and recovered waste oil. Any treated waste which does not meet applicable treatment standards is sent off-site for further treatment.

**DESIGN**

**CAPACITY:** Approximately 50,000 tons per month for the STU and a maximum of 1536 55-gallon drums for the DHSA.

**OPERATING  
CAPACITY:**

Same

**OPERATING  
STATUS:**

Active treatment and storage unit/fully operational.

**RCRA WASTES:**

See the Approved RCRA Part B Permit Application.



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Laidlaw Environmental Services (Lokern), Inc.

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**RCRA EXCLUDED  
WASTES:**

Wastes not accepted at this facility are: Infectious wastes, Nuclear Regulatory Commission regulated radiological wastes, Polychlorinated biphenyls (PCB's) as defined by 40 CFR 761, Class A explosives, Dioxin contaminated wastes defined in CFR 261 (F020, F021, F022, F023, F026, F027), Sewage wastes, and Compressed gasses (will be accepted for off-site transfer)

**STATE WASTES:** See the Approved RCRA Part B Permit Application.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

MAR - 6 1996

LETTER FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY

ATTACHMENT TO PART III OF THE DEPARTMENT HAZARDOUS WASTE FACILITY PERMIT

In August 1992, the California Department of Toxic Substances Control (Department) became an authorized state agency to implement regulations adopted by the United States Environmental Protection Agency (U.S.EPA) under the Resource Conservation and Recovery Act of 1980 and Hazardous and Solid Waste Amendments (HSWA) of 1984. Based on the agreement between U.S. EPA and the Department, the Department is implementing all the RCRA and HSWA regulations that were in effect before December 20, 1990.

The Department is not authorized to implement RCRA regulations promulgated by U.S. EPA after December 20, 1990. The Department was instructed to refer to the 40 Code of Federal Regulations (CFR) rather than California Code of Regulations (Cal. Code of Regs.), for all the regulations promulgated by U.S. EPA after the deadline.

The Carbamate wastes K156, K157, K158, K159, K160, K161, P and U wastes were listed in 40 CFR 261.32 and 261.33 on February 9, 1995, therefore, these regulations could not be implemented by the Department. By this letter, U.S. EPA Region IX acknowledges that Laidlaw Environmental Services, (Lokern) Inc. Facility (EPA I.D. No. CAD 980 675 276) (facility) has submitted documentation to comply with the carbamate waste regulations.

U.S. EPA, Region IX made a determination that the facility has sufficiently addressed the requirements set forth in Parts 261.32, 261.33, 264. Subpart I & J of RCRA regulations for carbamate wastes. The permit conditions for managing hazardous wastes in tanks and containers are incorporated into the attached Hazardous Waste Facility Permit. Laidlaw must comply with all provisions of this Hazardous Waste Facility Permit.

If anyone has any questions regarding this letter please call Ms. Lily Herskovits of my staff at (415) 744-2062.

Sincerely,

A handwritten signature in dark ink, appearing to read "Laura Yoshii".

Laura Yoshii, Acting Director  
Hazardous Waste Management Division